



## **Analysis of near-misses in scuba diving and their effect on divers safety behaviours**

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## Abstract

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<p>These research explores the occurrence of near-miss situation in scuba diving industry, aiming to identify the extend of such situations and the effect on divers behaviour during and after the near-miss. The study utilised a mixed-methods approach combining comprehensive survey and personal opinion of divers taking part in the survey. The research is identifying the occurrence of near miss situations, diver's education and preparation for such an event and their thoughts on cause of near miss situations. Furthermore the survey is identifying the corrective actions divers are taking to prevent similar situations in their future dives. The study identified the need on acknowledging near miss situations in diving and implementing a unified system of reporting such an events. The occurrence of near miss situations is significant and divers can have multiple situations progressing thru there diving career. However the higher level of training is not strictly related to smaller appearance of problems and the details suggest need of better education on every level of training. The study also identifies the gaps in knowledge on near miss situation and suggest further extensive and detailed research on the topic.</p>	
<b>Keywords</b> Near-miss situation, Diving safety, Diving accident, Diving training, Corrective actions.	

## Declaration of Authenticity



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**Research Title** : Analysis of near-misses in scuba diving and their effect on  
diver's behaviours

### Declaration:

I hereby declare that this research study is based on the outcome of my own research. I, as the author, declare that this research study is my own composition which has not been previously produced for any other qualification.

The research study was conducted under the supervision of Please enter the tutor's name.

*22.09.2024*

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Date

*Arkadiusz Srebnik*

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Student's Signature

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Arkadiusz Srebnik

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# **1. Introduction**

Diving allows sightseeing of an incredible, filled with colourful fish, corals and other marine animal's underwater world, that often is unavailable to the most people. It gives you the possibility of getting close to the nature and understanding marine ecosystems, as well as experiencing an exciting adventure of discovering shipwrecks, underwater caves, caverns and other mysterious places. Diving can be done in various places across the world, from coral reefs to cold oceanic waters, turning it into a unique and incredible experience for all locations. It is the platform for sharing common interests; many divers participate in activities for the protection of marine life, which helps increasing the pro - ecological awareness. Diving can be not just an exciting adventure, but also a meaningful, considerable and memorable experience. Diving can also present the other, risky side. It can be dangerous for several reasons, which are determined by the environmental conditions as well as technical aspects of diving. The major risk factors consist of: breathing difficulties, hypoxia, emotional and mental factors, physical phenomena (currents, waves), the depth of diving, equipment being used, heat loss exposure, inadequate preparation or maladjustment to the conditions. To minimise those risks, it is very important to follow the safety rules, to be properly trained, to use well maintained equipment and to dive accompanied by other experienced divers.

## **1.1 Research Background**

Diving has become a very popular form of recreation across the world. It is estimated that there is several millions of recreational divers across the world, however it is very difficult to determine the exact number as there is no single, central database that would collect those data from all diving agencies. One indication of big recreational diving popularity is that agencies like PADI (Professional Association of Diving Instructors) and SSI (Scuba Schools International) amassed millions of certified divers.

Diving can offer a wide variety of experiences, from calm and easy shallow waters to more extreme and an additional training demanding wrecks or caves.

Dive learning takes place under the supervision of qualified diving instructor and the courses take place in the dive organizations accredited centres, therefore a safe training in accordance with the developed methodology is guaranteed. As a result of successfully completing the training, the trainee receives a certificate required by the organizers of diving trips, dive centres and insurance companies.

Safe diving requires some mental predisposition. First of all, maturity, discipline, the ability of quick and objective assessment of the situations and a critical look at one's own skills, as well as proper stress management skills the ability of acting properly under time pressure situations.

Moreover, diving in an open water body, which is a very dynamic environment, requires a certain physical preparation of the diver. Currents, tides and waves that sometimes occur on the dive sites should be taken into account during underwater explorations.

Despite being a potentially dangerous sport, diving has a good safety range records. Although, it is impossible to eliminate completely all the risks, proper equipment, adequate training, experience, self-awareness and a safety-oriented attitude, can considerably decrease the possibility of any serious incidents.

## **1.2 Research Aim, Objectives and Hypothesis or Question**

The aim of the research is to analyse situations that could lead to accidents during diving with equipment (scuba diving) and their impact on the safe behaviours of divers.

The research is divided into three major hypotheses:

- I. does the diver experience impact the near miss situations,
- II. is the diver aware of the near miss situation,
- III. how does the near miss situation impact future dive plans.

The implementation of this goal is ensured by the survey, which also constitutes the test material for the implemented research hypotheses. The survey was prepared in accordance with the following approach:

1. The purpose of the survey was clearly defined,
2. Questions have been carefully selected in order to obtain proper answers,
3. Various question have been formulated (open, close, multiple choice, ranking), that resulted in complex and comprehensive answers,
4. Questions were arranged in the appropriate, logical order, from general to specific,
5. In order to obtain reliable answers, the anonymity of online survey completion was ensured.

The implementation of the approach using surveys ensures the reliable research material for drawing conclusions on the way to achieve assumed goals.

## **1.3 Research Methods, Material and Structure**

For the purpose of this study the survey method was used, as it is one of the data collection techniques used us quantitative research, that uses questionnaire (survey), including an online

method, to conduct interviews with respondents. Due to the benefits associated with conducting research, as well as the fact of the possibility of quick and ease collection of the large amount of data from various groups of respondents, the computer assisted web interview (CAWI) was used. The research tool in the form of a questionnaire was available online.

The study developed a survey called „Accidental situations and thee safety of diving” using Microsoft Forms platform (<https://www.microsoft.com/pl-pl/microsoft-365/online-surveys-polls-quizzes>).

The developed survey has been divided into 4 parts:

- Part I consist of general questions, related to each respondent and his/hers diving interests
- Part II includes questions related to the respondent’s diving experience (training) and their physical condition,
- Part III includes questions related to the near miss events,
- Part IV includes questions related to diving after experiencing near miss incidents.

The research material consists of the responses of respondents from the Facebook group on recreational and technical diving "Diving Instructors Malta" (which consists of 2100 members). As a result of the survey, 679 responses were received. However, not all responses came directly from this group, because some people from the group found the survey very interesting and shared it with their friends. For the purposes of this research, it is assumed that all responses received come from the group "Diving Instructors Malta". The PDF version of the survey was attached to the research as an ANNEX.

## **2. Literature Review**

Scuba diving is an industry regulated by numerous laws and local regulations. Scuba diving organizations are entities established by countries, scientific institutions, companies or individuals, with the goal of creating an organizational, legal and training framework for diving purposes. They can be divided into those dealing with: recreational, technical, scientific, military and commercial diving (mainly underwater works). The difference between them consists not only in their motives, but also in the degree of formalization as well as medical and technical support. Amateur (recreational) diving requires so-called light equipment, [Skrzyński 2006]. Until the early 1950’s, diving training was conducted only by naval and scientific organizations [Kurek 2007]. In 1959, the available to civilians, European organization CMAS (Confédération Mondiale des Activités Subaquatiques) was established, and several years later, in 1967 the American PADI (Professional Association of Diving Instructors) was founded. These are still the most

famous organizations in the world that popularize scuba diving and train recreational divers. The mass development of recreational (amateur) scuba diving began in the 1990s. Its main determinants were the technological progress and related to its new safe equipment and constantly improved training standards.

## 2.1 Diving Organizations

Currently, there are about 55 recreational diving training organizations, 16 technical diving organizations, 15 technical cave diving organizations, 6 scientific organizations, 9 commercial organizations, 1 organization certifying public safety divers - Public Safety Divers (ERDI Emergency Response Diving International) and 3 rescue and first aid training organizations and 4 international organizations for standardization, accreditation and quality (<http://www.emergencyresponsedivingacademy.com/>).

Rescue organizations and first aid training include:

- DAN-Divers Alert Network (<http://www.diversalertnetwork.org/>), <http://www.daneurope.org/>)
- EFR - Emergency First Response (<http://www.emergencyfirstresponse.com/>),
- ILS - International Life Saving Federation (<http://www.ilsf.org/>).

There are also organizations that are federations of diving organizations and act as a platform for exchanging information and setting common standards: EUF, WRSTC.

The diving law itself is based in most cases on the norms and standards of the organization. There are also organizations dealing with rescue and support of divers: e.g. DAN. The largest of them are: PADI/DSAT, SSI, SDI/TDI, CMAS, IANTD.

According to the information presented on the official website of the PADI federation, approximately 70% of diving certificates issued today are certificates of completion of courses in the PADI system. In its over 30 years of activity, PADI has issued over 22 million diving licenses (data from 2020). The constant upward trend in the number of courses conducted lasted from the mid-1970s (in 1975 - 61.2 thousand) to 2001, when 908.2 thousand certificates were issued. Since that year, we can talk about some stabilization - the number of confirmations of completion of a diving course issued by PADI annually until 2007 was almost 900 thousand. The record year in this respect was 2004, when 955,381 certificates were issued, of which as many as 577,494 were received by people who began their adventure with recreational diving, completed basic courses, mainly OWD. In 2007, the PADI federation issued 928.7 thousand qualifications for divers. Among them, 57.8% were certificates documenting basic courses, most of them were awarded by the PADI Americas branch (33%), PADI Europe received 18%. Certificates

confirming further education (advanced levels, specializations) were awarded in 2007 to over 392 thousand divers, of which 19% in PADI International Ltd. [Kowalczyk-Anioł, 2007].

In the light of the law, for example, Polish scuba diving is considered to be swimming underwater, with the use of a breathing apparatus and fins, in sports or recreational devices, with the use of additional safety functions (Regulation of the Council of Ministers on the use of scuba diving of May 7, 2002). According to these regulations, diving organizations operating in Poland, subordinate to the Ministry of Sport, training program, training instructors, must have (in addition to the instructor degree of their organization) the professional title of "Scuba diving recreation instructor" awarded by the Ministry of Sport.

## **2.2 Safety in Diving**

Many hazards are concerned with how to avoid potential injury or death. However, even with the best preparation, accidents can occur and divers may be exposed to the risk that their actions may result in civil or criminal proceedings. Diving Safety provides recommendations and guidelines to help divers reduce risk. All diving organizations, agencies or companies must first comply with the government regulations for recreational and free diving in their country and add, where permitted, all appropriate policies and procedures to control the safety of diving operations [<https://www.esdpanel.eu/sd-european-standards/>].

The works on establishing European standards began in the late 1980s and continue to this day. Today, the International Diving Safety Standards Commission incorporates in its minimum diving standards the ISO and EN standards that have been achieved over the years by agencies such as the RSTC – Recreational Scuba Training Council and the EUF – European Underwater Federation [<https://idssc.org/iso-en-standards/>]. The IDSSC also works to develop professional standards and procedures for rigorous diving conditions. The main objectives of the IDSSC are: (i) maintaining the integrity of the recreational diver, (ii) maintaining a low level of operational uncertainty in recreational diving, (iii) promoting the most comprehensive diving standards in countries where there are no national standards, (iv) supporting national standards [<https://idssc.org/recreational-diving-standards/>].

The standards concern of the requirements for diving training programmes (e.g. ISO 11121:2009 Recreational diving services. Requirements for introductory training

programmes to scuba diving), the conditions for conducting training, in addition to the general requirements for the provision of recreational diving services in accordance with ISO 24803 and the training and evaluation in recreational scuba diving in accordance with SO 24801-1:2014. ISO 24803 specifies three areas of service provision: (1) training and education, (2) organisation and conducting of diving activities for certified divers and (3) rental of diving equipment. [<https://idssc.org/iso-en-standards/>].

Diving safety and awareness of diving related hazards are the main activities of DAN, or Divers Alert Network.

Its main activities include:

- Education and training: offers a variety of educational courses and programs aimed at increasing divers' knowledge of safety, first aid in diving-related cases, as well as prevention;
- Medical support: operates a medical information center and a hotline for divers, where you can get advice on health problems related to diving. It also works with doctors and specialists to provide appropriate assistance to divers;
- Research: engages in research related to diving safety, decompression and other health issues in order to introduce new standards and practices in diving;
- Insurances and emergency assistance: DAN offers insurances that cover medical expenses related to diving accidents and organizes emergency assistance;
- Safety promotion: The organization conducts campaigns and programs aimed at increasing general awareness of diving safety.

Thanks to these activities, DAN aims to promote diver safety as well as address problems that may arise during diving.

### **2.3 Divers Training**

Divers training is a process that prepares course participants to dive safely and effectively in both open water as well as in controlled environments. The general stages of basic training can be divided into 6 steps: 1) Theory: A diving course usually begins with theoretical lectures in which participants are introduced to the following: – The physics of diving (pressure, gases, decompression illness), – Marine biology (ecosystems, aquatic organisms), – Safety (dive planning, emergency procedures), – Divers' equipment (types of equipment, its operation and maintenance). 2) Practical exercises in the pool: After lectures, participants move on to practical exercises in a controlled environment, such as a pool. During this stage, they learn: – Putting on and using diving equipment, – Basic diving skills (e.g. swimming, submerging, surfacing), –

Emergency procedures (e.g. how to respond in the event of equipment problems). 3) Open Water Diving: Diving in the open water where, under the direct supervision of an instructor, they gain practical experience in a natural environment. During these dives, they practice skills learned in the pool and learn how to adapt to changing conditions. 4) Passing the exam: After completing all stages of training, participants must pass a theoretical and practical exam to obtain a diving certificate. 5) Certification: After passing the exams, students receive a certificate confirming their diving skills and entitling them to dive within a specific depth range. 6) Further training: After completing the basic course, many people choose to pursue further education by attending advanced, specialty or technical courses that allow them to explore more complex and challenging diving conditions. Recreational diver training is offered by various organizations around the world. However, they all refer to the same levels: from a beginner diver (in open water up to 18-20 m) through an advanced diver in open water (30 m) to a diver on the professional path (dive master and instructor). Divers certified at the level of dive master and instructors are authorized to teach others, and to lead non-professional divers underwater. As they progress through the levels of training, recreational divers can receive training in specialized topics, such as: night diving, deep diving (40 m), using special gas mixtures (Nitrox) and using special equipment such as DPVs (diving vehicles). The next stage of training is technical diving. This is an advanced type of diving that goes beyond standard recreational diving. Technical diving uses a variety of techniques, equipment and procedures to allow divers to explore more complex and challenging underwater environments, such as wrecks, caves and greater depths. Key features of technical diving include: – Mixed gas use: Technical divers often use mixed gases (e.g. nitrox, heliox, trimix) to minimize the risk of oxygen toxicity and decompression. – Greater depths: Technical diving allows for exploration into deeper waters where traditional recreational diving can be dangerous. – Decompression planning and management: Technical divers must plan their dives carefully, paying particular attention to decompression times and preparing for potential problems. – Specialized equipment: Technical diving requires the use of specialized equipment, such as multi-gas regulators, dive computers, and appropriate exposure suits. – Training and certification: Technical divers must complete appropriate courses and obtain certification from recognized organizations to safely conduct these dives. A technical diver should have the following competencies: 1) Diving skills: (i) excellent swimming skills and body control underwater, (ii) knowledge of diving techniques in various conditions, such as wreck diving, cave diving and deep diving. 2) In the field of diving equipment: (i) knowledge of the use of various diving equipment, including oxygen, nitrox and trimix diving sets, (ii) ability to independently maintain and repair diving equipment. 3) In the field of dive planning: (i) ability to plan dives, including decompression calculations, understanding

decompression tables and gases used for a given dive, (ii) ability to assess risks and respond to unforeseen circumstances. 4) In the field of safety principles: (i) strict adherence to safety rules and procedures, including emergency procedures, (ii) knowledge of diving illnesses and first aid, including cardiopulmonary resuscitation (CPR) and decompression treatment. 5) In the area of group diving: (i) ability to work in a team and cooperate with other divers, (ii) understanding underwater communication and the use of hand signals. 6) In the area of diving at different depths: (i) experience of diving at great depths using appropriate techniques and equipment, (ii) understanding the effects of pressure on the body and techniques to counteract its negative effects. 7) In the area of gas management: (i) ability to calculate gas consumption and plan supplies during diving at great depths, (ii) knowledge of the different gas mixtures used in technical diving. 8) In the area of technical skills: (i) understanding of diving technology, such as rebreathers and underwater navigation systems. 9) In the area of diving physiology and psychology: knowledge of the body's response to diving, including behaviours related to aerobic and anaerobic physiology. 10) Practical experience: regular dives in different conditions to gain experience and maintain skills. Technical diving is an embodiment of skills, knowledge and safety, which makes it an interesting but also demanding activity for experienced divers. Despite this, many divers decide to continue with advanced technical training, being motivated by the exploration of wider and more interesting diving sites inaccessible to recreational divers. During the training, divers also learn how to apply procedures to prevent certain dangerous situations. Peer control is important, e.g. mutual equipment check before diving before entering the water, or mutual monitoring of gas consumption during the dive to prevent a gas shortage. In practice, the teaching process is mainly focused on the student repeating the actions, i.e. until he remembers or until he meets the minimum requirements. For example, during the theoretical part, students can take the exam many times. After each time, the instructor explains the mistake, and the student takes the test again. In most cases, the student does not correct the mistakes, and most often remembers which answer is correct. This leads to situations where the student meets the minimum requirements by remembering the correct answer to the test, having made the previous mistake. There is a belief that learning from one's own mistakes is more effective than repeating them (Metcalf, 2017).

Making mistakes that will have emotional consequences during the learning process is more ingrained in the diver's consciousness for longer. Therefore, assuming that divers make mistakes throughout their diving career is a much more effective way to teach. Therefore, divers should implement the element of failure in a controlled environment and under the direct supervision of professionals. For example, during a standard course, divers learn to control their gas consumption by looking at a pressure gauge. At one point, divers are asked to provide

information about how much gas they have left, without looking at the pressure gauge, and after giving an answer, they check whether the answer was correct. This is to develop an understanding of how much gas they are using. Another is an exercise where the instructor closes the student's cylinder during a dive. The student is aware that their cylinder will be closed, and the instructor checks their pressure gauges. The effect of this exercise is awareness of the situation of breathing when the gas supply is running low. The instructor could conduct such an exercise in a controlled and safe environment, such as a shallow pool. The same exercise conducted in two different environments, despite the same learning outcome, provides a different experience (Richland LE, Kao LS, Kornell N., 2009).

As divers advance, they gain experience through further education, conducting dives and repeating procedures, or simply learning from the mistakes of others. Diving conditions can vary greatly around the world, and even by conducting dives in different conditions, divers gain experience. We must also assume that in the process of gaining experience, divers made a series of bad decisions that led to near misses. Near misses experienced by divers are not recorded in any database. Organizations that create and maintain databases primarily record incidents that resulted in injury or death.

## **2.4 Diving Accidents Data**

Diving involves certain risks, therefore there is a need to monitor and collect data on diving accidents. On a global scale, there are several databases and organizations that collect statistics related to diving accidents. Two organizations are involved in collecting data on diving accidents, namely:

- Divers Alert Network (DAN) - one of the most important organizations dealing with diving safety. DAN maintains a database of diving accidents and offers assistance in the event of incidents.
- Rebreather Training and Safety Resources - databases and reports of rebreather diving accidents.

Data on diving accidents can also be found in the databases of other organizations that are not directly concerned with diving safety, such as:

- National Oceanic and Atmospheric Administration (NOAA) - their main purpose is to monitor the state of the oceans and atmosphere, but their databases also include data on diving accidents in the context of protecting the marine environment.
- International Marine Rescue Federation (IMRF) - This organization collects data on accidents and rescue operations, including divers.

- Databases of local and national diving organisations - many countries and local diving organisations collect and analyse data on diving accidents in their regions.

It is worth emphasizing that this data is often collected for educational and preventive purposes, to increase diver safety and reduce the number of accidents. In addition, descriptions of personal experiences and information about accidents can be found on many diving forums.

DAN has been maintaining a database of diving incidents since 1989. Originally limited to diving incidents, it now includes open-circuit scuba incidents, breath-hold incidents and rebreather incidents. The data is collected, analysed, anonymized and published in the annual DAN diving reports. In addition, on the website [<https://dan.org/safety-prevention/diver-safety/case-summaries/>], the reports include summaries, which often include expert commentaries, to help divers of all experience levels improve risk management skills and identify safe diving practices. The lead DAN's motto is "*Learning from your own mistakes and misfortunes is crucial, but don't miss the opportunity to learn from others.*" That's why information about near misses is so important and a key element in improving safety in this sport. Unfortunately, no databases contain descriptions of such situations. Near misses are a common topic of conversation between divers sharing their experiences. As a result, the only source is divers. That's where the idea came from to give divers the opportunity to share their own experiences of accidents that ended happily, but could have been different.

The term "near miss" is used in various fields, including medicine, engineering, public safety, and psychology, to describe situations in which a dangerous incident occurs but does not result in serious consequences.

In the context of medicine, "near miss" refers to situations in which a patient could have been seriously injured but for some reason did not. Research shows that analysing near misses is essential for improving the quality of healthcare. The benefits of reporting "near misses" include identifying systemic problems in procedures and creating a culture of safety.

In the case of diving, near misses refer to situations in which a diver could have had a serious accident but for some reason did not. It seems that analysing such cases can improve diving safety. In addition, it can contribute to creating a culture of diving safety.

Currently, no diving insurance organization conducts statistical analysis of "near miss" cases and the risk factors associated with diving, such as improper preparation, human error, diving equipment, and environmental factors. The psychology of diving plays a big role, i.e. decision-making under high stress, i.e. how stress and other emotional reactions can affect divers' decisions in near miss situations. The phenomenon of "normalization of deviance" is also significant, i.e. how getting used to risky behaviour can lead to dangerous situations. Although the topic of safety is extremely important and concerns divers all over the world, the lack of a

systematic approach to data collection and analysis of near misses as complex systemic events prevents the identification and management of risk in order to minimize it in diving. A good solution is to analyse specific cases of near misses to understand the mechanisms of their occurrence. In addition, analysis of individual errors taking into account the international approach can indicate differences in diving safety in different countries. The result of these analyses would be recommendations for divers on what actions can be taken to avoid near misses.

Near misses in diving are not a very well-researched topic in the diving literature. The problem is very complex and controversial. The difficulties in conducting any research start with the definition, and in the available literature all situations of "near misses" or "close encounters" are defined in a slightly different way and cover different situations. Divers Alert Network, the most extensive source of data on diving accidents, collects data on near misses, but the definition is slightly different. It includes situations with medical repercussions for divers, so it should be classified as an accident. It was classified as a near miss only because no professional medical assistance was provided and the divers were treated on site with normal temporary care. Darcy Kieran from the Business of Diving Institute conducted a study of near misses, including situations that resulted in mild to severe decompression sickness (<https://medium.com/scubanomics/survey-results-closed-calls-while-scuba-diving-f9a29cb558ef>).

However, the DCS itself was classified as a near miss. Situations where DSC is a near miss should be dismissed as a trigger for DCS after a dive where no prescribed braking method was used. In diving medical studies, this is classified as undeserved DCS - a situation where the diver did everything right but still got DCS after the dive. Complications in recognizing the trigger, possible previous medical problems that the diver was unaware of. All of this leads to the diver having medical problems after a dive and not being able to change their habits to prevent the same thing from happening again because the cause of the problem was not identified.

Hence, the research undertaken in this work based on the analysis of survey results can be valuable research material for diving organizations, conducting education and promoting safe practices. Such research is crucial for improving safety in diving and reducing the number of accidents and dangerous situations.

### **3. Methodology**

Statistical analysis is used to examine accident data to identify causes, patterns, and preventability. Descriptive statistics are used to assess the various factors that contribute to

accidents, such as weather conditions, equipment condition, and diver behaviour during the dive. It is often used at the beginning of a statistical study to understand the basic properties of the data before moving on to more complex analyses. Another method often used to assess which factors have the greatest impact on the likelihood of an accident occurring is regression modelling. For example, one can examine whether a diver's age and experience affect the risk of a near miss.

### **3.1 Outline**

The statistical analysis was carried out in the following steps:

- 1) the purpose of the analysis was defined, including the indication of quantitative and qualitative variables,
- 2) data was collected based on surveys,
- 3) a database of data was created in a spreadsheet,
- 4) the correctness of the data was checked,
- 5) descriptive statistics were used,
- 6) pie charts and histograms were created for data visualization,
- 7) regression modelling was performed,
- 8) reports from the conducted surveys were prepared,
- 9) inference was made,
- 10) recommendations were indicated,
- 11) data was archived.

The data was collected using commonly used survey methods, which are among the data collection techniques used in quantitative research. In these methods, a questionnaire or survey is used as the basic tool to conduct interviews with respondents. Surveys can be conducted online.

Research using online methods is becoming increasingly popular among researchers. For many, it is the basic channel for reaching and communicating with respondents. Among the methods used, such as: Paper And Pen Personal Interview (PAPI), Computer Assisted Personal Interview (CAPI), or Computer Assisted Telephone Interviews (CATI), computer assisted web interview (CAWI) is characterized by the ease of reaching a large number of respondents and universality of use.

The PAPI method, as the most classic and oldest, involves hiring interviewers to conduct interviews and recording the answers in paper form. In the CAPI method, interviews are computer-assisted, using special software, and the respondents' answers are automatically

recorded in digital form. The CATI method involves conducting interviews by phone with computer-assisted processing of results. The CAWI method is one of the commonly used and dynamically developing methods supporting research, including scientific and social research. In general, CAWI involves conducting an interview using the Internet. The respondent receives an invitation to the study by various methods, e.g. by e-mail or text message (<https://www.inbia.pl/>) [20.06.2024]. Most often, in the invitation, the respondent receives a unique link or a unique login and password with which he or she logs in to a specific study.

The greatest advantages of CAWI research include:

- quick survey completion time,
- low survey cost,
- ease of achieving the appropriate sample size and sample representativeness,
- ability to conduct the survey entirely in electronic form,
- individual adjustment of the number of questions and their content to the researcher's needs,
- freedom in visualizing graphic elements during online surveys,
- ability to reach a large number of respondents in a very short time,
- ability to track results in real time,
- universality.

In addition, the CAWI method has a guarantee of anonymity and allows for participation in the study at a time convenient for the respondent, which affects the reliability of the data. The challenge that researchers face in the case of online surveys is the lack of direct contact with the respondent. There is a risk that the study is completed by another person or one person impersonates several respondents.

Additionally, the disadvantages and difficulties associated with the use of the CAWI method in research include:

- costs related to the need for technology (computer, Internet);
- the risk related to the lack of proper understanding of the questions in the questionnaire, which on the one hand may "falsify" the results, and on the other cause the respondent's reluctance to continue the study;
- computer skills, which in the case of respondents who do not have such skills may make it difficult to continue the research that has been started.

### 3.2 Validation of data contained in surveys

The survey was validated in terms of the correctness of questions, correctness of answers and survey logic. In particular, the following was carried out:

1. Validations of questions - some questions were defined as mandatory questions that the respondent had to fill out. If they did not do so, a message appeared with information about the need to answer the appropriate question. It is impossible to complete the survey until the mandatory question is answered. The survey also contains other validation options, for example whether it is a single or multiple choice questions.
2. Validation of answers - concerns answers to multiple choice questions, Validation takes place in one step together with the questionnaire design, how many answer options can be selected by survey respondents.
3. Limit and input type - specifies the number of characters in the text input field, e.g. in the case of describing your near miss experience.
4. Random answer options in surveys - the random answer option is a function that displays answers, for example in multiple choice questions, in a different order. This avoids situations in which survey participants respond according to a specific pattern, such as always choosing the answer option listed first.

### 3.3 Representative sample

The calculation of a representative sample is a key element in surveys of respondents' opinions, affecting the credibility of the results and drawing general conclusions. Determining the population, margin of error, confidence level are essential steps in the process of calculating a representative sample.

Population definition – in the research, the populations are the divers of the “Diving Instructor Malta” Group. The group consists of 2100 people.

Margin of error - is a value that determines how much the sample results may differ from the results of the general population. The research assumes an error margin of 5%.

Confidence level – this is a value that indicates the probability that the sample results are within the margin of error. The work assumes a confidence level of 95%.

The sample size was calculated using the formula

$$n = (Z^2 * p * (1-p)) / E^2 \quad (1)$$

where:

n – sample size

Z – Z-score value for a given confidence level (for 95% it is 1.96)

p – estimated population proportions

q – estimated population proportions for the complementary event ( $q = 1-p$ )

E – margin of error

In the case of a limited sample, a correction is made in the form of:

$$n' = (N * n) / (n + N - 1) \quad (2)$$

where:

n' – corrected sample size

N – population size

### **3.4 Ethical considerations**

The ethical consideration regarding the data collected by survey distributed over wide spread of social media re as follows. Exclusion due to lack of access to internet connection. Exclusion due to lack of presence on social media such as Facebook and Instagram.

Exclusion due to lack of access to certain closed group on Facebook platform.

Lack of will to fill the questionnaire from responders who are afraid of being ridiculed by the diving society.

As the topic of these work is a very vulnerable and is touching a matter of safety of diving some responders or readers could recognise it as dangerous for the diving industry. This paper is made strictly to bring the attention to near-miss situations, not to point out mistakes of any diving federation or particular divers or entities in diving industry.

## **4. Results, Analysis and Discussion**

### **4.1 Estimation of representative sample**

For the purposes of the study, 2100 surveys were sent out, and 679 responses were received.

The estimated sample size assuming 50% participation according to formula 1 is 385 people.

$$(n = (1,96^2 * 0,5 * (1-0,5)) / 0,05^2 = 384,16)$$

Correction for a finite population, in the paper  $N= 2100$

$$(n' = (2100 * 384,16) / (384,16 + 2100-1) = 324,8.$$

The size of the representative sample is 325 people. As a result of the survey, 679 responses were received, so this number is higher than the estimated size of the representative sample, which ensures obtaining reliable results and carrying out conclusions.

## 4.2 Survey results

The survey results were presented in relation to the assumed division, i.e. in relation to the specified parts:

5.2.1 Includes answers to general questions related to the respondent and their interest in diving,

5.2.2 Includes answers to questions related to the respondent's diving experience (training) and physical condition,

5.2.3 Includes answers to questions related to a near miss situation,

5.2.4 Includes answers to questions related to diving after a near miss situation.

### 4.2.1 General characteristics of respondents

679 diver respondents took part in the study. The largest group were people aged 40-49, Fig. 1.

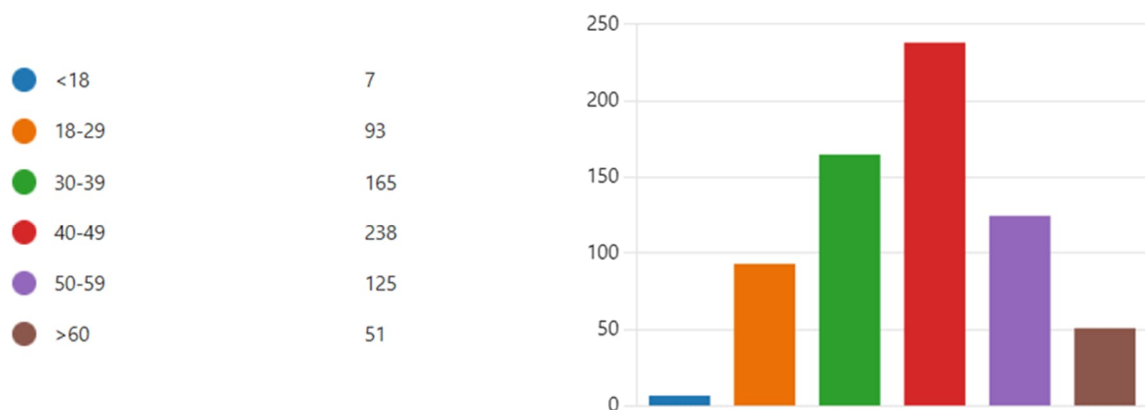


Figure 1. Age of respondents. Source: Near miss situation in diving in relation to diving education system survey.

More than twice as many men as women took part in the survey, 456 and 220 respectively. Three people did not reveal their gender. Most respondents indicated Europe as their place of residence, followed by people from North America, Fig. 2.

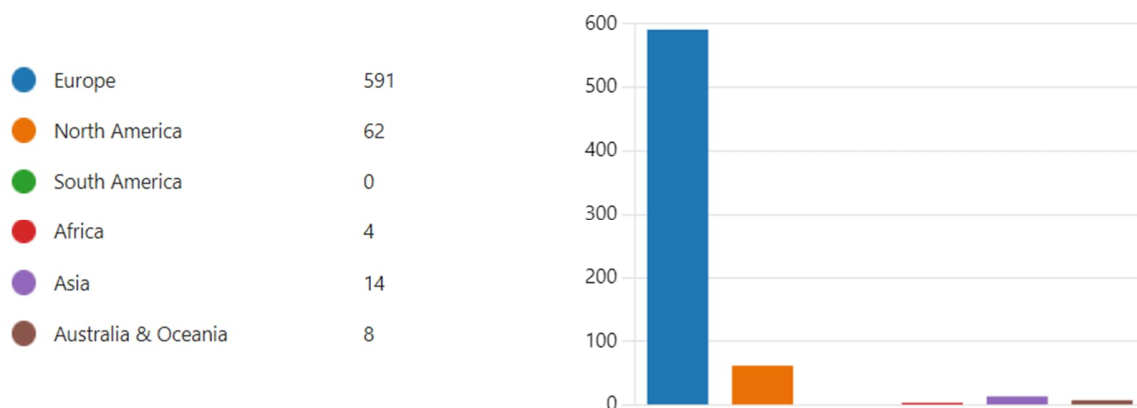


Figure 2 Place of residence. Source: Near miss situation in diving in relation to diving education system survey.

291 people learned about diving from friends, 151 from a family member, 83 from the Internet, 88 from television, and 68 from a travel agency. They started diving at various ages, from 7 to 57. Most often, in 327 cases, which are 48%, the first dives took place in the country they resided. The next group, consisting of 164 people (24%) indicated a place of travel outside the country. Almost the same group of 150 people (22%) indicated a place close to home. The smallest group of 38 people (6%) indicated a trip outside the place of residence, but in the country. The vast majority of respondents (44%) most often dive in warm sea water, slightly less 37% in fresh water, while 18% indicated cold sea water.

The visibility conditions in which divers most often stay are presented in Fig. 3. The vast majority dive in poor and medium visibility conditions. Only 8% in visibility conditions of over 30 m.

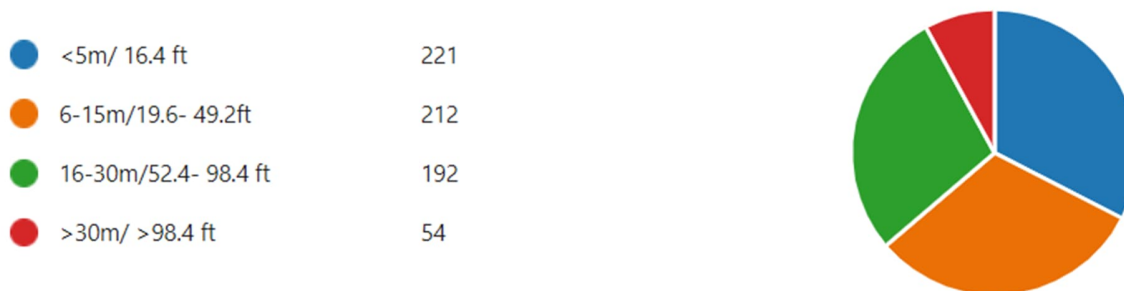


Figure 3 Visibility conditions during most dives. Source: survey Near miss situation in diving in relation to diving education system.

#### 4.2.2 Divers' experience, training and physical condition

Diving experience is shown in Fig. 4. Similar numbers were represented by groups with experience of 11-20 years (176 people) and >20 years (163 people). Slightly smaller groups

were those certified 6-10 years ago and 2-5 years ago (126 people). The smallest group of respondents were people who received the certificate less than a year ago (31 people). It can be concluded that the vast majority of respondents were people with long certification experience.

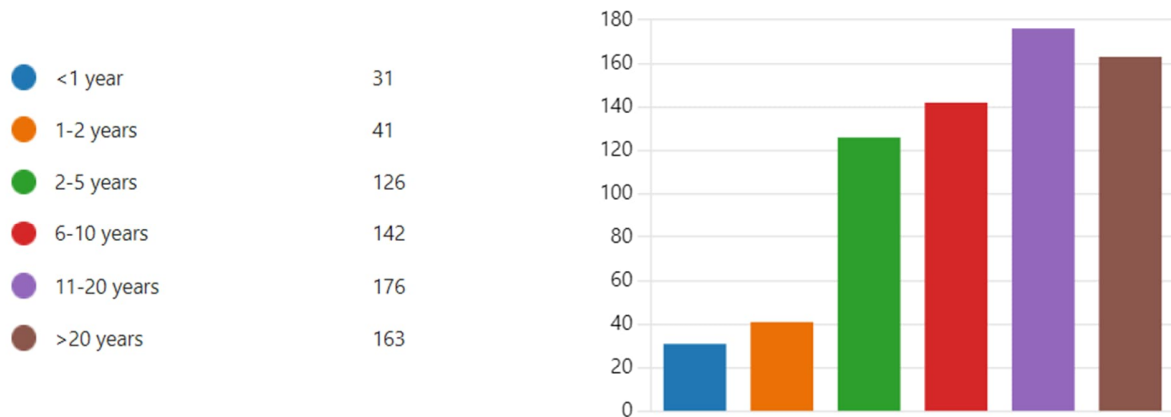


Figure 4 Certified diving experience. Source: Near miss situation in diving in relation to diving education system survey.

The respondents were mostly recreational divers, making up 76% (518 people), and technical divers were 24%, or 161 people. Most recreational divers (62%) indicated that they preferred more demanding, deep dives with poorer visibility. Technical divers, on the other hand, indicated deep dives in 43% and almost equally cave and wreck dives (30% and 27%). The largest group among the respondents were divemasters (295 people), slightly smaller were AOWD (216) and Tec diving (217), Fig. 5.

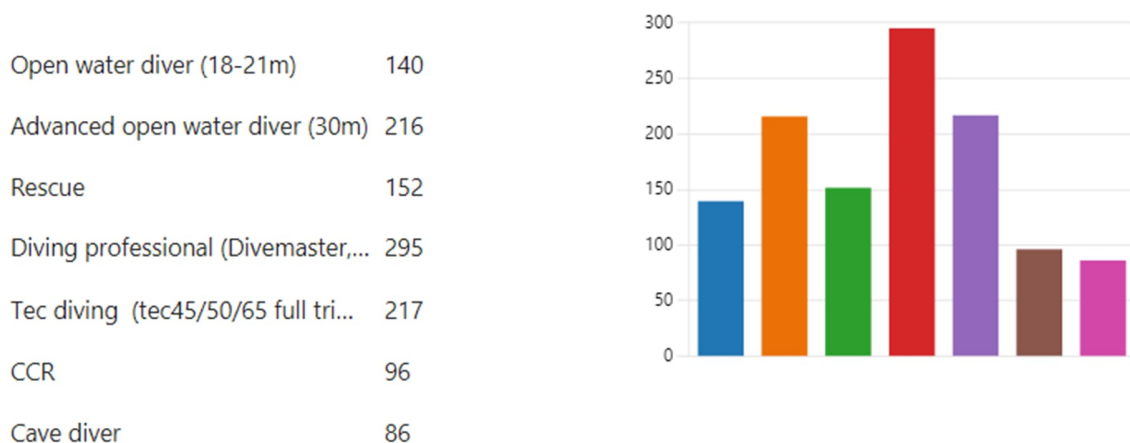


Figure 5 Current level of training of respondents. Source: Near miss situation in diving in relation to diving education system survey.

The largest group indicated PADI as the certifying federation (414 people). The remaining federations accounted for less than half of PADI, Fig. 6.

PSAI - Professional Scuba Associ...	24
CMAS - Confédération Mondial...	142
SSI- Scuba Schools International	183
HSA- Handicapped Scuba Assoc...	6
PADI - Professional Association ...	414
SDI/TDI -Scuba Diving Internati...	144
BSAC- British Sub Aqua Club	28
GUE- Global Underwater Explor...	39
IANTD- International Associatio...	123
Im certified in more then one di...	101
I.A.C- International Aquatic Club	6
Different	70

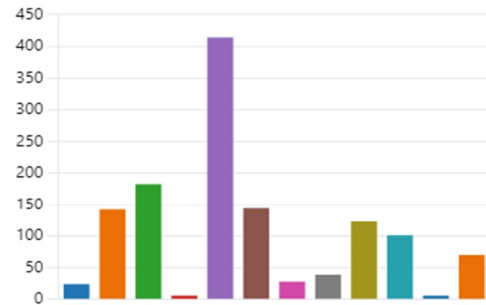


Figure 6 Diving federation certifying respondents. Source: Near miss situation in diving in relation to diving education system survey.

The majority of respondents were experienced divers (364 people) with a high number of dives >300. The smallest group (7 people) indicated <10 dives. A similarly large group consisted of divers with the number of dives 50-100 (80 people) and 102-200 (89 people).

Daily	68
Once a week	247
Once a month	157
Once a year	21
Few times a year	162
Less often	20

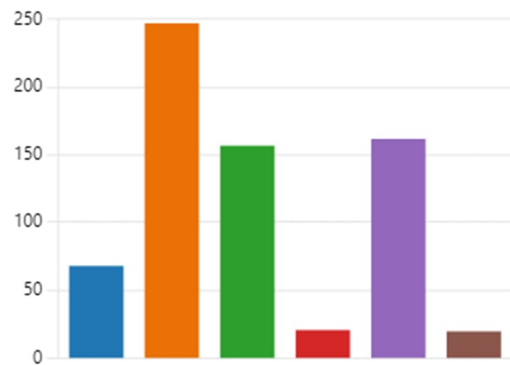


Figure 7 Frequency of dives in a year. Source: Near miss situation in diving in relation to diving education system survey.

In the case of diving frequency, 247 respondents indicated once a week (247 people). Quite large groups indicated once a month (157 people) and several times a year (162 people). Once a week means that they perform 50-52 dives a year. 68 respondents indicated daily dives. The physical condition of the respondents also indicates that they are quite active, Fig. 8. The majority of respondents (52.6%) indicate light daily exercises. A fairly large group exercises moderately several times a week.

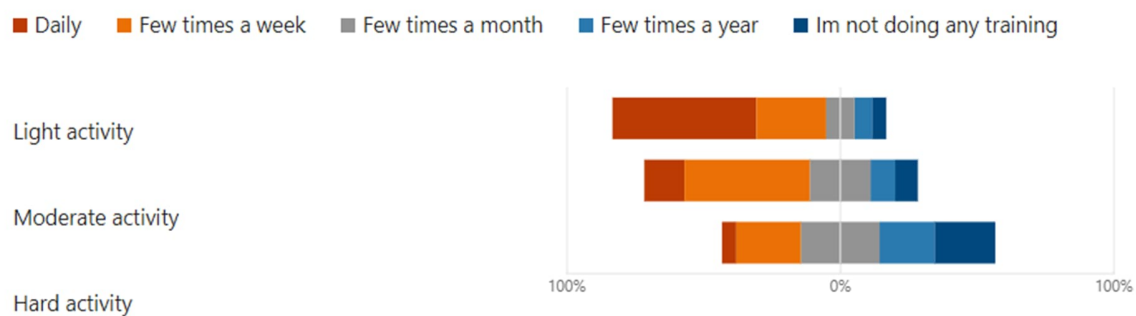


Figure 8 Frequency of physical activity to maintain good condition. Source: Near miss situation in diving in relation to diving education system survey.

The most common form of physical activity is walking (412 people), Fig. 9. Almost equal groups indicated gym exercises, swimming and others.

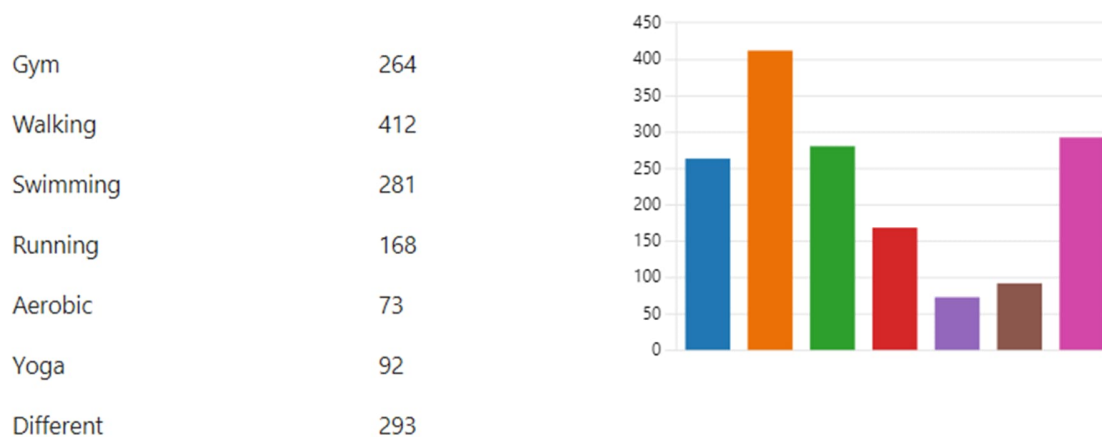


Figure 9 Form of physical activity of respondents. Source: Near miss situation in diving in relation to diving education system survey.

#### 4.2.3 Near misses

Before describing near misses, respondents were asked to describe their impressions of their first diving course. The question asked them whether they rated their first course as (i) good, (ii)

bad, or (iii) no opinion. The vast majority (83%) said it was good, 11% said it was bad, and 5% had no opinion. In the case where respondents were satisfied with their first course, the vast majority of 412 people indicated good care from the instructor and the provision of more extensive material than required on the course as the reason. The remaining two equal groups felt that they had learned a lot (310 people) and felt well educated and prepared for diving (296 people). The situation was different when respondents were not satisfied with their first diving course. 40% of respondents felt unsatisfied with the training, 30% had the impression that the instructor did not care whether the students had learned anything, 19% indicated too fast a pace of teaching, and 10% felt overwhelmed by knowledge

#### 4.2.4 Near misses

When asked about near miss situation that will fit the definition presented at the begin knowledge of the questionnaire, 320 which comes to 47% of the responders answered Yes to the question. 360 which is 53% answered that they never had a near miss situation, Fig.10.

In the construction of questionnaire responders who answered No do not contribute to other valid knowledge about near miss occurrence and were redirected to the end of survey and finished by sending their results. From that question a group of our responders will be only a group of people who experienced the near miss situation.

680 Odpowiedzi

1-300|680



Figure 10 Number of near miss situations that divers experienced. Source: Near miss situation in diving in relation to diving education system survey.

In relation to how many near miss situation each responder experienced equal amount answered 1 (32%)103 responders and 2 (32%) 100 responders. 26% of responders (84 persons) had between 2-5 near miss situation in there diving career and 10% 33 people experienced more than 5 near miss situations.



Figure 11 The occurrence of near miss situation in diving. Source: Near miss situation in diving in relation to diving education system survey

The indication of what was the most common near miss situation comes in question „Chose the near miss situation that you had” Most common near miss situation for responders was equipment failure 23% followed by getting lost on the dive with 20% responses. Uncontrolled ascend to the surface with 17% and out of gas situation 16%.

13% of responders marked that they had other nor specified in the questionnaire situation. As we will see in further examples of written testimonies about near miss situation, the situation it self can very complicated and related to multiple factors. The least responders answered that they experienced Panic during the dive with just 11%

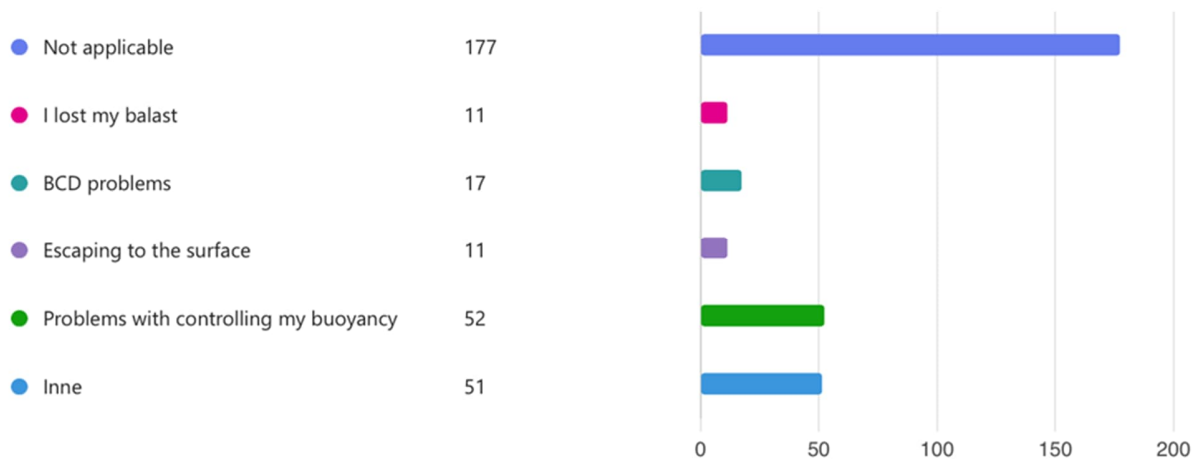


Figure 12 Type of near miss situation that divers experienced. Source: Near miss situation in diving in relation to diving education system survey.

When indicating which detailed problem lead to particular near miss situation in section about uncontrolled ascend to the surface, responders marked equally problems with controlling the

buoyancy and other both answers with 16% followed by buoyancy control device problems with 5% losing ballast system with 3% and escaping to the surface 3% was the least common cause of uncontrolled ascent, Fig. 13.

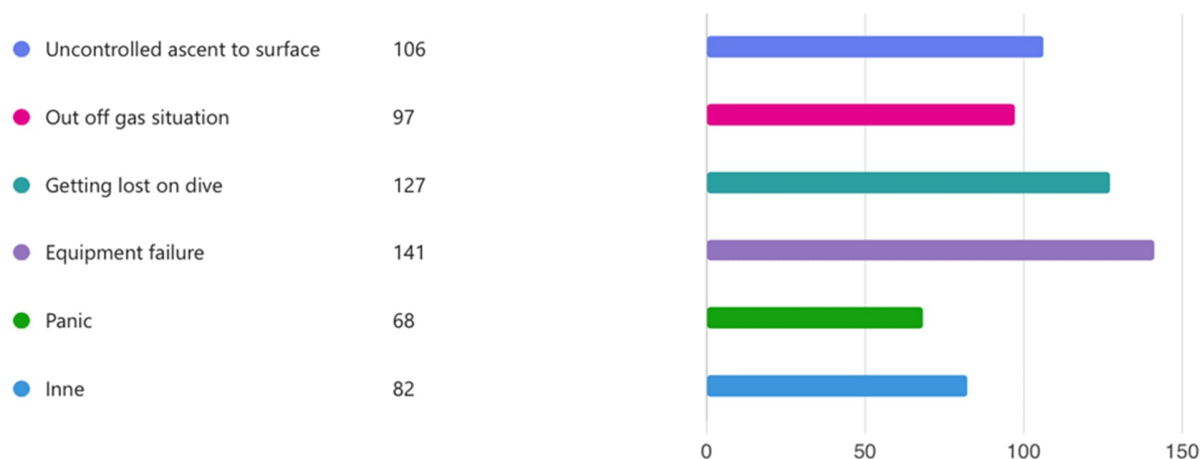


Figure 13 Uncontrolled ascent detail. Source: Near miss situation in diving in relation to diving education system survey.

On out of gas situation the most common was marked as different with 13%. In that answer responders could write their own answer, some of the examples are "During real life air share my mouth piece came off my primary. Another diver came to aid. „ „Twinset valves closed in error due to being distracted" „Regulator failed on deco gas" or even situations where diver trying to help others went to danger resulting in out of gas situation "Team member lost his buoyancy control device and this cause issues as we stayed to help"

Another common answer was going in to conditions where divers used more gas hadn't normal with 11% responders. Equally 5% of divers responded that they didn't check their blindly gas supply during the dive and blindly following the leader of the dive. 4% had a gas leak, 3% purposefully extended the dive and 2% got lost and extended the dive, Fig. 14.

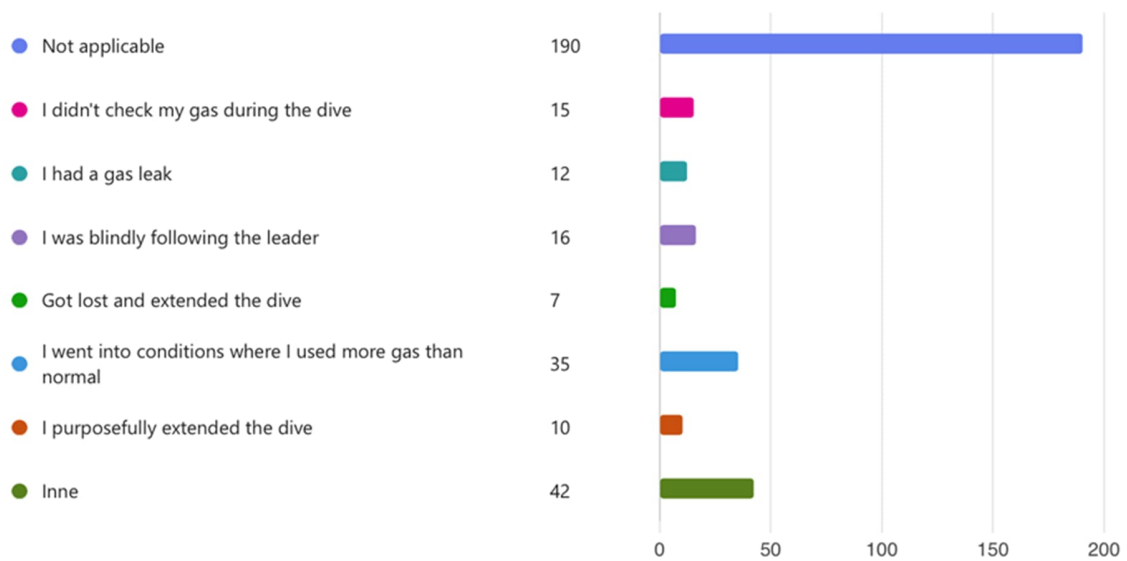


Figure 14 Out of gas situation details. Source: Near miss situation in diving in relation to diving education system survey.

In situation of getting lost 13% lost their buddy and were not able to find him, 12% got lost and could not find a their way back to the exit point, 10% got caught in current and another 10% answered „Different” such as poor visibility and narcosis "Visibility dropped suddenly" "Poor visibility" „Low vis, unfamiliar dive site, current" "Silt out and narcosis, underneath a WWI German battleship at 40m" "I got lost when I got narked and had to rescue myself ""It was inside wreck and there was no guide line. The visibility got pretty bad and I couldn't find a way in any direction. Everywhere was wall." 9% of persons got lost leading the dive and another 3% didn't pay attention to the person leading the dive, Fig. 15.

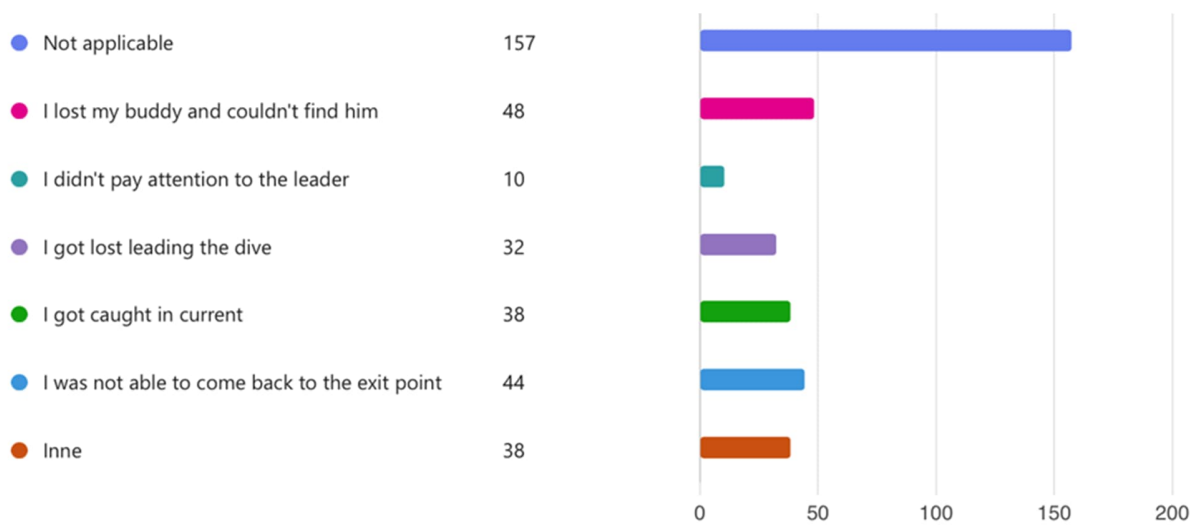


Figure 15 Getting lost situation details. Source: Near miss situation in diving in relation to diving education system survey.

When it comes to situation related to equipment failure 29% indicated that there equipment broke (fell apart) during the dive and 14% marked „other” like "BCD would not inflate due to block caused by duck call feeding from the same for feed" "During a dive with very old equipment the regulator stopped working. I was prepared to this situation so we made a perfectly controlled ascent while buddy breathing." "Both needed service and I failed to identify that. "Most often with LP valves getting stuck open on inflators or cells failing on CCR „ "Tank to reg o-ring failed at depth „ 5% of responders didn't check there equipment before the dive and went In the water without connecting all the equipment and 3% didn't check rented equipment before the dive. Lowest number of 2% indicated that cause of failure was not servicing their private equipment, Fig. 16.

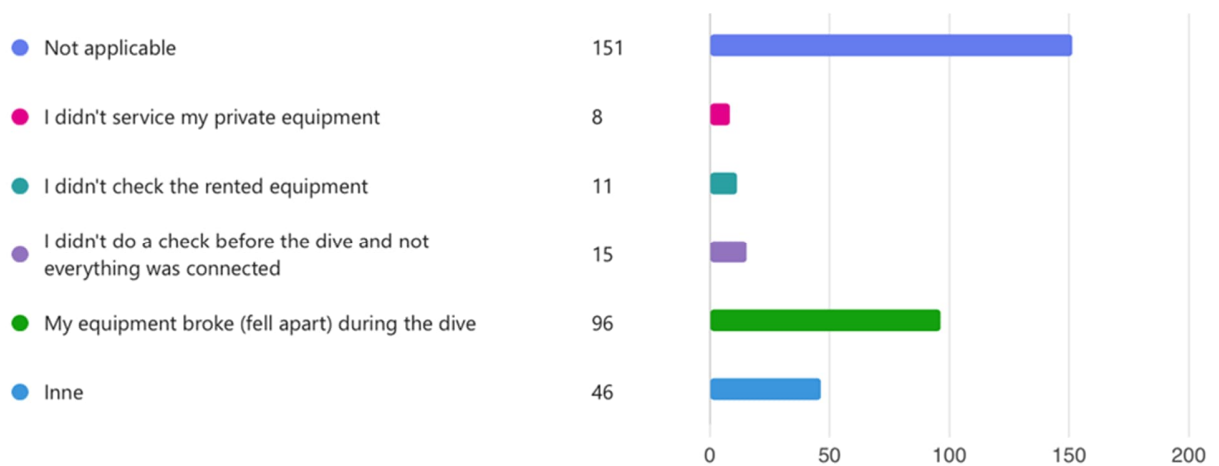


Figure 16 Equipment failure details. Source: Near miss situation in diving in relation to diving education system survey.

In relation to last indicated in questionnaire problem which is Panic during the dive, most common answer was „Other” with 15% indicating the complicity of panic underwater. In that answer responders pointed out multiple different causes with some of them not being able to identify why the panic occurred "I think the problem was the exertion during the dive that cumulated from many days of diving. I just found myself not being able to breathe properly and couldn't catch my breath. I surfaced a bit quickly but it was a recreational dive." "After getting covid vaccine - started getting anxiety" „Drysuit flooding caused me to start sinking uncontrollably" "Low gas on 90m" "Diagnosed anxiety, never happened underwater before" "still don't know. Place I knew well, favourite buddies, sunny day, (only) 20m deep, slept enough..."

Further responses were not being experienced enough for the dive 9% and not being prepared for the dive 6%, only two divers 1% indicated the cause of panic as not diving for a long time, Fig. 17.

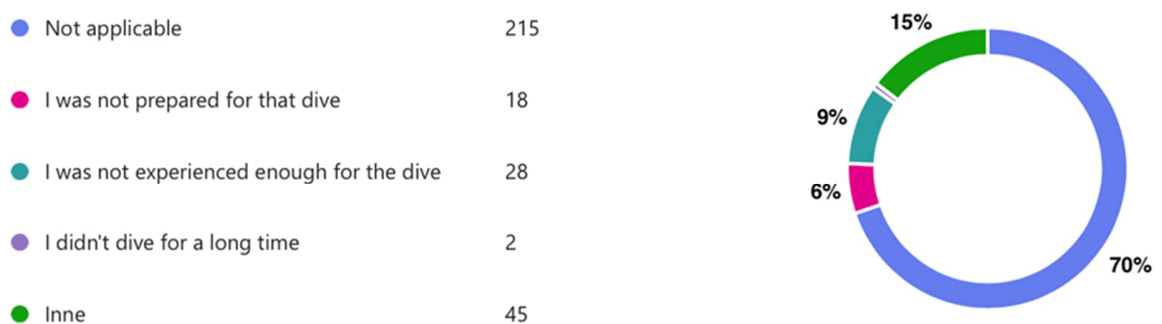


Figure 17 Cause of panic details. Source: Near miss situation in diving in relation to diving education system survey.

Furthermore when asked about Did the same near miss situation happened to you more than once 78% which comes to 244 responders answered No and 17% 53 persons responded Yes. 7% (23 divers) responded that they had a similar situation.

#### 4.2.5 Level of Divers training and experience during first near-miss situation

The questionnaire indicates that most near miss situations for the first time happened to divers with Advanced level of training (advanced open water diver) with 31% responders followed by divers on basic level of training (open water diver) with 25%. Third place in first time near miss situation in relation to level of training occurred for professional level divers (divemasters and instructors) with 13% and 12% on high Rescue level which is last level of training before professional, Fig. 18.

13% of responders marked that they were on level of technical training when the first near miss situation occurred and 6% marked „ different” such as „None it was the first dive” „Military”

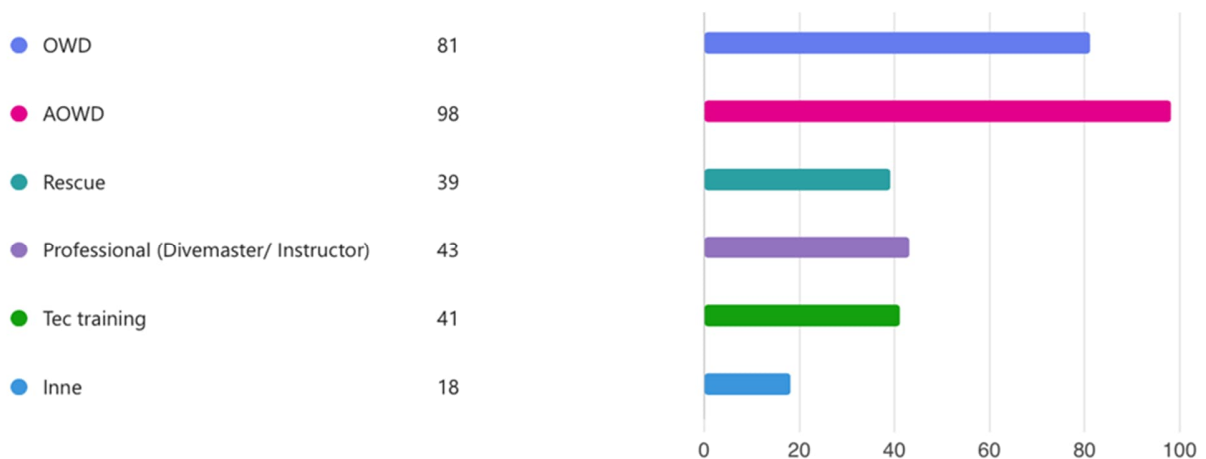


Figure 18 Level of training during first near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

In relation to the amount of dives done till the day of first near miss situation most common answer was 11-50 dives with 27% responders. Followed by 51-100 dives with 20% and over 300 dives with 17%. The group with least amount of dives (less than 10) was a group of 16% followed by divers with 101-200 dives with 12% responders. On the last position were divers which had 201-300 dives with 9% responders. After finishing the basic level of training (open water diver) diver is finishing with 4 dives and to finish next level (advanced open water diver) in

most of diving federations diver have to do additional 5 dives. The standards are indicating that Advanced open water diver is a diver with minimum of 9 dives. For professional training divers have to prove a minimum of a certain amount of dives. To start a course in most of federations on a level of divemaster diver have to prove 40 dives and is finishing course with minimum of 60 dives in total.

For instructor course most common prerequisite is 100 dives to start course. We have to remember that divers don't have to do higher courses if they don't have that need, and can do shallow dives thru all their careers in diving. That's why we can have an Open Water Diver or Advanced Water Diver over 300 dives in total Fig. 19.

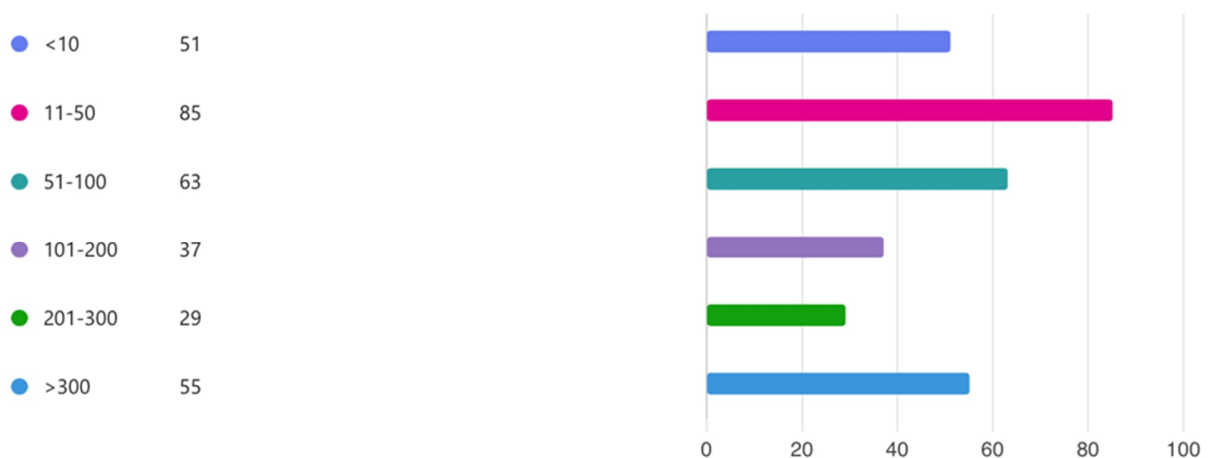


Figure 19 Amount of dives till the first near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

On a question was the near miss situation dive conducted with a professional diving centre or instructor responders were equally split with 50% saying Yes and 50% answering No. 91% of divers indicated that they were not alone on the near miss dive and only 9% answered that they conducted the feral dive alone, Fig. 20. 84% of the divers responded that they were not aware that anything could go wrong on the dive and 16% indicated that they were aware that something could happen.



Figure 20 Buddy system during the first near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

From initial 16% of divers that were aware that something could happen on a near miss dive when asked about why they continued with the dive most common answer was that they trusted the professional with which they were diving and 38% simply didn't want to lose the dive. 15% of the divers felt pressure from the group to continue and conduct the dive and only 3% indicated losing their money as their motivation to continue.



Figure 21 Motivation for continuing with the dive knowing that something could happen. Source: Near miss situation in diving in relation to diving education system survey.

77% of the divers had assigned a direct buddy on a first near miss dive and 23% was diving in a group without a direct person as their buddy.

From initial 77% which had a direct buddy on the dive divers are indicating that the buddy was on the same experience level as them 35% and equally 20% indicated that the buddy was less experienced or a diving professional. 15% indicated that the buddy was on a higher level of experience and 10% indicated that the buddy was on the same level of training as them but at a higher experience, Fig. 22. In here we have a situation where divers on the same level of training are not equal with experience in diving, the differences may come from the amount of

dives done till the day or diving in various different conditions. What is interesting is that the divers knew that their buddy is on the same level and identified that he have more experience than themselves.



Figure 22 Level of training of direct buddy on first near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

The awareness of danger during the near situation is pretty high with 69% of divers responding that they were aware and 31% responding that they were not aware about the danger.

From initial 31% that were not aware of the danger during the near miss situation 87% responded that they realize the danger after the near miss situation 7% responded that they did not recognize the danger after the dive and 6% was informed about the danger of the near miss dive by other divers after the initial situation, Fig. 23.

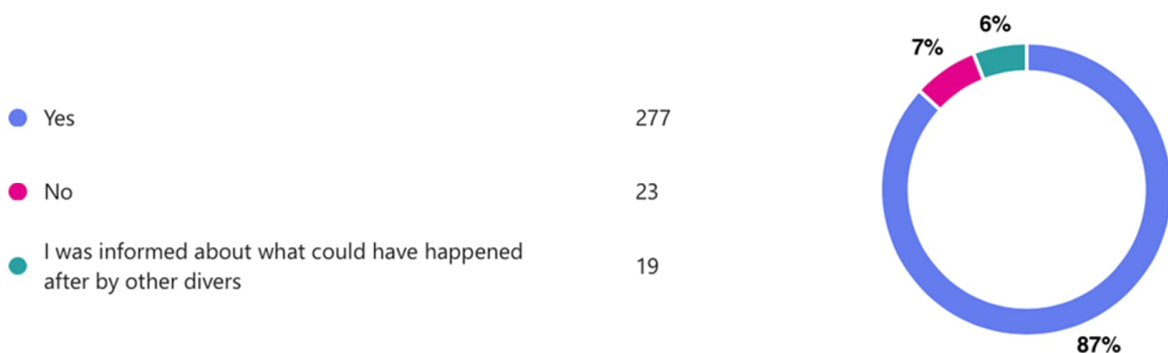


Figure 23 Realizing the danger after the near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

73% of divers responded that their direct buddy realized the danger related to near miss situation during the dive and 28% said that their partner was not aware about the danger.

In relation to dive buddy realizing that something is not correct on a dive and helping diver in near miss situation responders indicated that 69% cases the buddy helped and in 31% cases the diver had to sort out the problem on its own, Fig. 24.



Figure 24 Awareness of the danger by buddy during the near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

When asked why their buddy did not help them during the near miss situation responders pointed out that the buddy in 67% cases was not aware of enrolling problems. 17% pointed out that the near miss situation occurred so fast that their buddy simply didn't have the time to help and another 17% indicated that the buddy just didn't care about helping them, Fig. 25. What is interesting, nobody marked the answer that at the time of them having problems their buddy couldn't help because he had a problem of his own. That indicates situations where buddy of the person experiencing near miss situation in most of the cases could help.

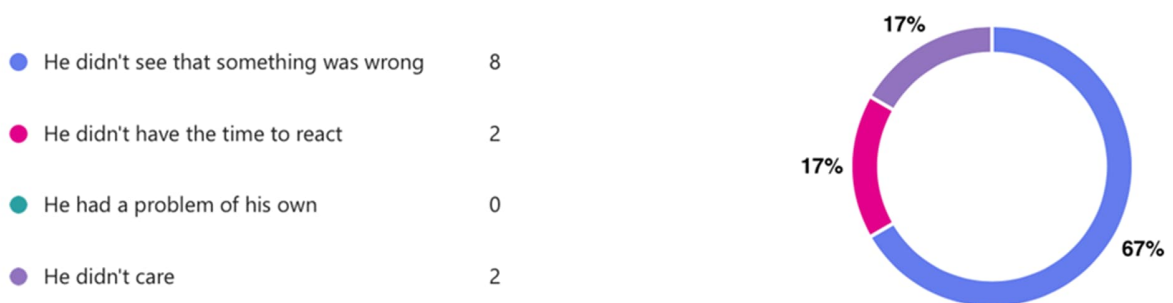


Figure 25 Why did the buddy not help during the near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

Another two questions are strictly related to the problems of gathering the data for these paper, and concern of reporting on near miss situation. In question did you report the near miss situation to anyone 56% of responders answered that they did not report to anyone and 44% did report the near miss dive, Fig. 26.



Figure 26 Reporting on near miss situations. Source: Near miss situation in diving in relation to diving education system survey.

From initial 44% responders reporting the near miss situation 56% reported to diving centre, 31% reported to „others” which of most common was telling there dive buddies or instructors „Fellow divers” „Budy’s” „Tec instructor and several senior fellow divers” „ Buddy, leader”.10% reported to dive boat owner and only 4% felt that the situation is so important that they did report for diving federation, Fig. 27. That data indicates that the knowledge about near miss situation is common between diving centres, instructors, and dive buddies which none of them are keeping any type of formal data about the near miss situations. Only institution that would keep the data is diving Federation in which case most of the time the data is not accessible for the public.

● Diving centre	76
● Diving federation	5
● Dive boat owner	13
● Inne	42

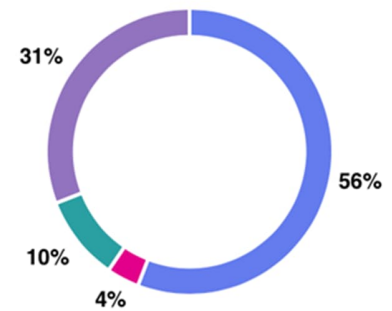


Figure 27 Reporting source after near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

Significant amount (92%) of divers didn't consider looking for medical assistance after the near miss situation with only 8% considering that solution.

When it comes to divers getting precautions and thinking about securing them self's in case of emergency the number is quite high with 66% answering they had diving insurance during the near miss situation with 34% answering No to the question about insurance.

The spread between diving insurance type is as follows 66% leader on the market of diving insurance (DAN) 24% other diving insurance companies and 10% divers with national security insurance, Fig. 28. In that case we have to remember that in certain regions of the world national insurance is covering all costs of diving accidents and divers who are conducting dives within the borders of their country don't feel the need of paying for additional insurance provided by common diving insurance companies. On multiple occasions divers with national insurance will only buy additional insurance when traveling abroad.

● DAN diving insurance	138
● National security insurance	21
● Other insurance company	50

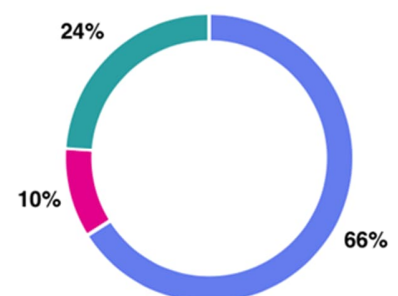


Figure 28 Type of insurance divers had during the first near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

#### 4.2.6 The effect of near miss situation on divers habits

After identifying the occurrence and details of the near miss situation the divers were asked several questions about affect that the near miss situation had on their behaviour on the dives conducted after the first near miss dive. That section is an indicator of how divers are reacting on a situation that potentially could end up as severe medical repercussions and correcting their diving habits to avoid future problems underwater.

What is surprising in the section, on first question „did the near miss situation had any effect on you” 48% answered No, Fig.29. Having in mind that in the previous question about awareness of danger during the near miss situation 69% of divers experiencing near miss was aware of the danger and further 39% was informed about it after (Fig. 23), that number is significantly high. 52% Responders answered that the near miss situation had effect on them and was asked further detailed questions.



Figure 29 Were the divers affected by the near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

In a group of people answering that the near miss situation had an effect on them only 2% which comes to 5 divers responded that they stopped diving completely, with further 3% 8 divers that stopped diving for some period of time. Significant amount of divers 96% which comes to 307 responders continued diving after the first near miss situation, Fig. 30.



Figure 30 Did the divers decide to stop diving after the near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

A group of 231 (73%) divers admit to changing their habits after the first near miss diving with another 84 (27%) divers admitting to not changing anything in their behaviour.



Figure 31 Types of changes divers applied after the first near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

In a group of divers who did change their habits in diving after the first near miss dives the most common change was being more considerate about the dive conditions 14% followed by putting more effort in proper planning before future dives 13%. Divers also admitted that they are more eager to cancel the dive if they fill that something is wrong 12%. 9% changed their habit of traveling and are always taking their private equipment with them on dives with another 9% putting more attention to dive briefings before the dives. 8% of the divers changed their gear after the near miss dive and 6% started to check there gas supply more often. Another 8% decided to choose their buddies more strictly and 4% decided put more effort in choosing their dive providers for future dives. Only 6% decided to add checklists to their routine, checklists are

a common occurrence in more complicated technical diving. Most of federations teaching technical diving courses are advising using checklists on an everyday basis, with some of the courses like Closed Circuit rebreathers where the checklists are mandatory. Another mandatory practice is doing a buddy checks before the dives, something that every divers is learning from the first diving course, unfortunately the practice is mostly overlooked by divers which are more experienced, in that case 8% of responders realized the importance of buddy checks. As the last answer with 5% of divers admitting to change in their habits is servicing their private gear regularly. Regular gear servicing is a common practice in diving. Diving equipment should be serviced according to producer's recommendations and sometimes even mandatory by internal country regulations.

In these questions we have to take in to account that each diver could mark more than one answer which indicates that divers not only changed something in relation to what was the initial problem on a near miss dive but to several steps to avoid series of small problems leading to another near miss situation. For example, "Im choosing my dive buddies more strict ", "Im more considerate about the dive conditions", "Im more eager to cancel the dive if I feel something is wrong „ or "I started to check my gas more", "Im always doing buddy checks", "Im choosing my dive buddies more strict ", "I changed my dive gear", "I always take my private equipment on dive trips", "I do more planning before the dive", "I do better briefings before the dive", "I added checklists to my routine", "I service my gear regularly ", "Im more considerate about the dive conditions", "Im more eager to cancel the dive if I feel something is wrong".

In another question responders were asked did the near miss situation taught them something. With 92% responders answering yes to that question and 4% responding No. Another 4% was not sure about the educational point of near miss situation.

In relation to their first near miss situation majority of responders 68%, decided to deepen there diving knowledge and did consider doing a higher courses. 32% decided to stay on the same level of training that they were doing the near miss dive.

68% of divers deciding on doing further education is a significant number in relation to how educated they felt in the moment of their near miss. On a question „ Do you think your diving knowledge and skills during the first near miss situation was adequate to the level?" Exactly the same amount of divers responded that yes there knowledge and skills were adequate to the level of training. With 19% saying No and 13% that were not sure.



Figure 32 Divers response to question „What did the near miss situation taught you” Source: Near miss situation in diving in relation to diving education system survey.

Diving is a very community based sport and when divers were asked did they ever went to another diver, before the dive and try to help him sharing their own near miss situation as an example 71% said yes. It is another indication that the knowledge about the near miss situation is present in diving industry and more experienced divers are eager to help there less experienced divers with avoiding similar situations. Fig. 33.



Figure 33 Willing of divers to help others giving their near miss situation as an example. Source: Near miss situation in diving in relation to diving education system survey.

In another question 55% of responders admitted that they saw a similar near miss situation on a dive happening to other diver with another 45% saying that they never saw anything similar happening to others.

When asked did they ever heard about a similar near miss situation happening to others 63% of responders said yes with another 18% admitting to hear that kind of stories multiple time. Divers are a community of people that like to share their experience not only the other divers but with their families and random people. The knowledge about a near miss situation in diving

industry is something commonly and wide spread between divers yet very little documented. Lack of reporting and presence of stories told by other divers lead to underestimating the importance and dangers of near miss situations. As survey shows multiple divers are experiencing those situations on every day basis sometimes more than once yet still some of them decide to disregard the situation and not take any corrective actions. From the other hand majority of divers who do experience near miss are taking their time and effort to secure them self's from another potentially dangerous situation.



Figure 34 Divers awareness about near miss situation. Source: Near miss situation in diving in relation to diving education system survey.

From the divers that answered yes to the question about experiencing near miss situation last question of the survey was an option to write down in details there near miss dive. 214 divers used that opportunity to share their stories. The answers are very broad in terms of complication and causes leading to near miss situation. From very simple for example „uncontrolled ascent to surface from approx. 25 Mtrs, air stuck in feet of dry suit” to very complicated and detailed where responder was left without of place to finish.

Example of one of the most complicated answer:

„Location: Gulf Fleet wreck Red Sea, Sha’ab Ruhr Umm Gamar Date: December 2nd 2022, 11:53 AM Start time: 11:53 AM End time: 1:28 PM Dive length: 1h 34 min Team briefing: nothing formal, gas planning a couple of nights before with V., asked for a max END of 40m. Did not account for O2 narcosis. Dive lead: V. Previous experience: M. dove Gulf Fleet in 2021 w/ H. (same configuration, no travel gas), V. several times over the past years (JJ CCR). Pinnacle dive for F. (no CCR Trimix certification) and A. (less than 10 dives lower than 60m, excluding training dives). Dive plan: descend as fast as possible to wreck, 3-5 minutes bottom time (10 minutes

total descent and bottom time), ascend slowly and briefly survey the Colona IV (~60m) upon return. Approach wreck from starboard, dive underneath and across wreck at MOD 102m towards portside, slowly ascend to inspect deck & crane, as well as captain's cabin if timing allowed. Type of dive: zodiac entry (departing from safari boat). Return to the safari boat. Weather and water conditions: sunny, windy, 28 degrees Celsius air temperature, 0.5m waves, water temperature - 24 - 28 degrees Celsius, average temperature 25 degrees Celsius, visibility ~20m. A.'s perspective (in red A.'s mistakes) Dive planning: Gas checks, gas calculations (A.'s O2 @ 130bar, asked for top-up, 170 bar - not enough O2). Plans included turning over 2 DPVs and 2 EAN50 tanks to another dive team who was supposed to meet us at 6m deco stop before their dive to the Colona IV (~60m). Entry: First M. & A., w/ stages, DPVs and oxygen tanks provided in- water by boatman. Down to 5m for regs, stages re-pressurisation and bubble check. Next V. & M., w/ stages, back-mounted CCRs, DPVs handed in water. No S-drills, no team check on the surface, no team check @ 5m, ok confirmed across team. Dive report: Slowly descended after go-ahead at 5. A. consistently 10-15m above dive lead to save air (gas consumption concerns based on recent experience - very high SAC when hyperventilating), did not understand when dive lead was calling for the team to stay closer together. At least 10-15m across all axes between divers. Did not establish order of divers on the surface, did not go into formation once the descent had started. Gas switched from travel to bottom @ 68m (Ana), switched alone to necklace 2nd stage instead of long hose. Did not check for long hose stow/availability/ease of reach. Travel gas stage was badly configured (2 left posts instead of left-right post for 11.1l stages, configuration done on deck the same morning was erroneous). Stages were not held by bungees, left to hang on the sides. Arrived at the wreck after ~ 11', way behind initial plan. Descent rate much lower than predicted. No equalisation problems. DPV speeds 1-3, consistently throughout the dive. V. approached the wreck as planned, A. followed closely behind, F. and M. 2-3 m behind. Once under the wreck, A. turned head to left side and up to inspect wreck bottom, regulator mouthpiece separated from 2nd stage, regulator flew behind (necklace 2nd stage). Aspirated a small amount of water. Light moved from right to left hand and signalled vigorously to the dive lead, who turned to assist momentarily. Right hand looking for long hose 2nd stage, which was caught between the travel stage valve and body. Managed to grab 2nd stage and breathe, exited overhead and ascended quickly to 80 m (15' into the dive) and stood by the mast to recompose and slow breathing rate (until 17', when the other divers finished deck inspection). The other 3 members on the team stayed on deck, none aware of what occurred with the exception of V., who validated 2-3 times from 5-10 m that A. was ok before resuming wreck survey. At one point M. was 10m lower than A., he was arranging stages, A. waited above and watched in case assistance was needed. Ascended towards the

Colona IV still breathing bottom gas, A. did a gas switch to travel gas at 51m (22' into the dive, 80 bar left in t"

## 5. Final Arguments

### 5.1 Discussion

Looking back at the data collected during the survey it is very important to acknowledge the existence of near miss situations in Diving. The amount of data collected just during one online surveys and multiple people contacting me during the process of gathering the data suggest that is very important topic and multiple people related to diving industry are interested in expanding knowledge in that matter. The only reliable source of other data related to near miss situation can be found in article published in „In depth” magazine prepared by Darcy Kieran based on authors survey (<https://medium.com/scubanomics/survey-results-closed-calls-while-scuba-diving-f9a29cb558ef>). It is important to notice that near miss situation in diving need to be strictly defined. The definition is in most of the cases pretty fluent and brought which is a y of problems in comparing the data. However both of the data bases, one prepared for this dissertation and one prepared by Darcy Kieran have a lot of common points.

Firstly the acknowledgment of occurrence of near miss situation or „Close calls” as author calls them is one of the most important for diving industry. The amount of divers reporting the near miss situation is different in both of the surveys (94,5% Darcy Kieran 53% Author) which could be an indication of differences in multiple fields. It could suggest the differences in quality of training in different parts of the world. In survey prepared for the paper most of the responders were from Europe and for the survey of Mr Darcy Kieran most were responders from the magazine from United States of America. The differences between diving industry in USA and Europe are massive and the markets are treated completely different by the industry leaders. In the article author is stating similar numbers of near miss situation ( 63,8% Ccr trained divers, 53,5% Cave divers 48,8% tech divers ) regarding the „Tech” trained divers which is closer to the number of above survey. The responders of „near miss situation in diving in relation to diving education system” survey are in majority a professionals working in the industry as instructors or divemaster’s which means that they have more chance of working with random divers on various levels which would suggest, there higher exposure to multiple problems underwater. From the survey of Darcy Kieran in the article is stating that diving professionals (divemaster’s and instructors ) found them self’s in problems in 81,2% while diving for recreational purposes 24,7% while providing training 21,2% while receiving training and the same amount 21,2% while guiding. Taking in to account how strictly regulated is the diving industry regarding training and

guiding the numbers of near miss situations should be very low or close to zero however the surveys are suggesting different, in the same matter in my survey multiple people in last question where they could recall there near miss stated the situation happened during course and guided dives. For example „ First deep dive, in the blue, over 40m down with the instructor well below me. Started hyperventilating, wanted to remove my reg to breathe. Looked up to shoot to the surface but decided against it. Went back up to high 30s, started breathing deeper and got situation under control. Continued the dive, was met up by the instructor on his way back up. He never knew what happened.” Or „ During my OW course, the instructor was not really interested in teaching. More interested in his gf who was at home. The sea looked calm, shore dive. We dropped down, about 10 minutes into the dive you couldn't see your hands in front of your face. Couldn't see the other student. Couldn't see the instructor... „ Furthermore in survey in question nr. 33 „ Was your first near miss situation a dive conducted with professional diving centre or instructor” 50% of responders answered yes. That is a scary statement that half of the near miss situation was under supervision of professionals in diving industry which should be an example for any other divers. PADI, leader in diving industry is stating in their manual as member code of practice „ 1. Put the safety of diving clients and students as your first priority and responsibility. In doing so, abide by the requirements and intent of PADI Standards and Procedures in the PADI Instructor Manual, PADI's Guide to Teaching, Training Bulletin and other updates while applying your best judgment during the PADI courses and programs you conduct. (Padi Instructor manual 2017 Padi member Code of practice art 1)

In regards to the types of near miss situations author of article in the In Depth magazine included multiple different near miss situations which are strictly related to technical diving such as entanglement or entrapped, mild/ severe DCS, hyperoxia and hypoxia however some of the near miss situations are the same as in survey made for these paper. The results are quite similar in covering fields. When it comes to uncontrolled ascend to the surface the author in their survey found 21,6% divers had that problem in comparison to 17% in our survey. Out of gas situation was 19,1 comparing to our 16% in there survey Darcy Kieran included also a question about ending a dive with less gas then planned (28,4% responders) which is mostly related to technical diving and planning multiple gasses for the dive. In our survey the technical gas planning aspect was omitted to reach wider spectrum of divers. The amount of divers getting lost during the dive is very similar 21% for Darcy Kieran survey and 20% for our survey, however again author included another similar question about separation during the dive which was 24,1% responders. For our survey the two was combined in one question as a result of that would be problems with coming back or ending the dive without a partner or guide resulting in the same. Equipment problems are suggesting the same amount of attention put by divers in to

their diving equipment 26,5% in Darcy Kieran and 23% in our survey. Both of the numbers are suggesting that big amount of divers and diving providers are not putting proper attention to their diving gear. However keeping in mind that in the US studies most of the responders were technical divers the repercussions in failing diving equipment could be way more severe and lead to more dangerous outcome than in recreational diving. The biggest difference in responses was in questions about panic underwater 25, 9% for Darcy Kieran and 11% for our survey. The difference may come for the formula of the question itself were for our survey the question was strict and asked about just Panic situation where Darcy Kieran formulated his question as Panic or Near-Panic situation. Adding statement of near-panic situation to the question would suggest that more people would include that answer in their response and they felt uncomfortable and close to losing mental control underwater. Also as our survey showed Panic is such a complicated topic in diving that multiple divers could not recall why the panic happen and when it started which in combination with different stress resistance and awareness could lead to different responses in the survey. The topic of panic in the water is big problem for diving industry and can vary a lot even to a small change in relation to diver's background. For example numbers of panic situations in group of fresh divers with low certifications and low amount of dives will be completely different then the numbers in a group of highly certified full technical divers with lots of experience.

Very interesting results show up when we compare the personal awareness of divers in relation to near miss situation. Mr Darcy Kieran in his survey asked the responders „ What factors do you think contributed to the close call(s) you have experienced? The answer was 29.2%: error in judgment due to lack of experience, 27.3%: inexperience in that environment, 26.1%: unfavourable weather or dive conditions (e.g., current), 21.1%: poor and/or failure to communicate, 19.9%: overconfidence, 17.4%: unfamiliar conditions/environment. All of that answers are in big part covering the same topic that our responders pointed out in question nr. 54. What did the first near miss situation teach you? Divers draw the same conclusion when answering the question. For example „Always be prepared for changing situations underwater” „ To be more aware of your surroundings and to always choose the "right" buddy for the type of dive, especially if you are doing photography dives.” „ Danger can be anywhere under the surface of the ocean, at 1m or 100m, it doesn't matter how good you think you are, respect the environment you're diving in” „Be prepared for the worst every dive” „Better preparation” „Monitor the current conditions” „always prepare for the worst situation” „Check conditions” „Always be prepared for near miss situation” Author also included in his survey multiple other answers which all of them are appearing in the same answer for our survey without any suggestion for the responders.

Darcy Kieran survey 28.0%: problems involving the use of equipment - „Always check equipment” „Check every Tiny piece of equipment” 8.1%: peer pressure - „ Never give in to peer pressure, do your checks properly, follow proper procedure at ALL times.” „To not let others confidence outweigh your experience” „To speak up” „Not to be influenced by other divers” 11.2%: skipping steps in pre-dive checks - „Strictly follow ccr checklist” „Always check LP connections” „Never assume anything works unless you've specifically checked it” „thorough checks before the dive; be prepared for the worst, practice emergency drills frequently” „Pre-dive checks” „Check twice, check again, check everyone, discuss, sync with others, educate” 28.0%: problems involving the use of equipment- „Equipment familiarisation” „Have more back up equipment and signalling device” „Regular equipment servicing” „Never trust your ccr. Always have extra redundancy on your computers”.

And lastly and most important for our survey is the acknowledgement of near miss situation. As stated multiple times in these paper near miss situation do happen and yet somehow are omitted by the diving industry. In his article Darcy Kieran asked a question about reporting of a near miss situation. In the question „ With whom did you share your close call experience(s)?” Author is stating that only 4,9% that did not share there near miss situation with anybody, where in our survey as much as 56% divers said that they did not report the situation to anybody. That is significant difference in culture of sharing divers experience and what we could consider trying to effect the industry to change. From the divers that answered that they shared their experience with others for Darcy Kieran survey the answers were- other divers: 88.9%, dive instructors 28.4%, their student divers 19,1%, non-divers 16,1% For our survey the answers were more focused on institutions that could actually keep records of near miss situations like - Diving centre 56% Dive boat owner 10% diving federation 4% and others which is a significant amount others 31%. The 31% of others in answers were „Fellow divers” „Budy's” „Tec instructor and several senior fellow divers” „Buddy, leader” „Instructor” „Medics” „Diving Club” „my friends” the answers are covering the same groups of people mentioned in Darcy Kieran survey.

Also in conclusion to that Darcy Kieran is stating „ Vice versa, 87.0% of survey respondents said that other divers had shared close call experiences with them and 71.6% that at least one of their dive instructors had done so.” Which in our question nr. 59 „Did you ever hear about similar situation happening to another diver” the answers were 63% yes and equally 18% on multiple times and No. Furthermore 71% of our responders stated that they went to another diver and were giving their near miss situation as an example to help other divers. The numbers are a suggestion that in broad diving industry more attention and procedures should be put in place for reporting on near miss situations. The first step to making diving industry safer is

changing procedures and forcing the dive providers to keep records of near miss situations and wide. Acknowledgement of a situation like that happening in diving.

## **5.2 Conclusions**

During analysing of the survey prepared for this dissertation all of the aims were met.

Occurrence and details of near miss situation was identified and measured.

Amount of divers and their will for corrective actions after the near miss situation together with types of corrective measures that the divers implemented was identified.

Response from divers on their personal feelings regarding their near miss situation, training and their preparation for diving during and after the first near miss situation was gathered and analysed.

The analysis of the survey clearly shows that diving industry have to better acknowledge the appearance of near miss situation and implement better ,unified system of reporting to prevent further accidents. Gathering the data on current near miss situation could lead to significant changes in system of training for future divers. As not all of the near miss situation could be avoided most of them could not appear if the divers would be better educated and informed during their education process.

The survey also shows that more detail should be put in enforcing existing rules and regulations especially regarding diving equipment and diving operations. In the survey details it is highlighted that big portion of near miss situation was supervised or organized by diving professionals who should be example for the community, yet failed to meet the expectations.

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## Appendix 1: Near miss situation in diving in relation to diving education system.

### Questionnaire form

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 1 z 17

\* Wymagane

# Near miss situation in diving in relation to diving education system

Definition of a near miss

"Any unplanned event that could've caused physical injury or property loss but didn't"

For example an uncontrolled ascend to the surface that could have resulted in injuries like barotrauma, DCS or even death in extreme cases; but for whatever reasons it didn't have any consequences.

## You and your diving education

<18

18-29

30-39

40-49

50-59

>60

1. Age? \*

Male

Female

I prefer not to say

2. Sex? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 2 z 17

Europe

North America

South America

Africa

Asia

Australia & Oceania

3. Place of residence? \*

From family

From friends

From internet

From agent on my vacations

From Television

4. How did you get to know about diving? \*

Wartość musi być liczbą

5. At what age did you start diving? \*

Wartość musi być liczbą

In your place of residence

Close to my place of residence

On a trip in my country of residence

On a trip outside my country of residence

6. Where did you start your diving education? \*

Fresh waters (lakes, rivers, quarry )

Salt waters warm (sea, ocean)

Salt waters cold (sea, ocean)

7. In what climatic conditions do you most often dive? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 3 z 17

<5m/ 16.4 ft

6-15m/19.6- 49.2ft

16-30m/52.4- 98.4 ft

>30m/ >98.4 ft

8. In what visibility conditions do you most often dive? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 4 z 17

Diving education

<1 year  
1-2 years  
2-5 years  
6-10 years  
11-20 years  
>20 years

9. How long have you been certified for? \*

Recreational  
Technical

10. What type of diving do you most often do? \*

Shallow comfortable dives  
More demanding recreational dives (deeper, low visibility)

11. Recreational

Cave diving  
Deep (below 50m)  
Wreck penetration

12. Technical

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 5 z 17

Open water diver (18-21m)

Advanced open water diver (30m)

Rescue

Diving professional (Divemaster, Instructor)

Tec diving (tec45/50/65 full trimix)

CCR

Cave diver

13. What is your current level of diving training? \*

PSAI - Professional Scuba Association International

CMAS - Confédération Mondiale des Activités Subaquatiques

SSI- Scuba Schools International

HSA- Handicapped Scuba Association

PADI - Professional Association of Diving Instructors

SDI/TDI -Scuba Diving International/ Technical Diving International

BSAC- British Sub Aqua Club

GUE- Global Underwater Explorers

IANTD- International Association of Nitrox and Technical Divers

Im certified in more then one diving federation

I.A.C- International Aquatic Club

Different

14. What diving federation you are certified with? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 6 z 17

<10

11-50

50-100

101-200

201-300

>300

15. How many dives have you done till today? \*

Daily

Once a week

Once a month

Once a year

Few times a year

Less often

16. How often do you dive? \*

17. How often do you exercise? \*

Daily Few times a week

Few times a

month Few times a year

Im not doing any

training

Light activity

Moderate

activity

Hard activity

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 7 z 17

Gym

Walking  
Swimming  
Running  
Aerobic  
Yoga  
Different

18. What type of physical activity do you do? \*

I think it was bad  
I think it was good  
I have no opinion

19. How was your first diving course? \*

I think I learned a lot  
My instructor took a good care about me and give me more knowledge than I had in materials  
I felt educated and prepared for diving

20. Good \*

I feel like I didn't learn enough  
I felt overwhelmed with the knowledge  
Instructor was not interested in my education  
The tempo of learning was too fast

21. Bad \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45  
<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 8 z 17

Near miss situation

Yes  
No

22. Did you have any near miss situation? \*

1  
2  
2-5  
>5

23. How many near miss situations did you have? \*

Uncontrolled ascent to surface  
Out of gas situation  
Getting lost on dive  
Equipment failure  
Panic

24. Chose the near miss situation that you had? \*

Not applicable  
I lost my balast  
BCD problems  
Escaping to the surface  
Problems with controlling my buoyancy

25. Why did you have an uncontrolled ascent to the surface situation?

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45  
<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVWVjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 9 z 17

Not applicable  
I didn't check my gas during the dive  
I had a gas leak  
I was blindly following the leader  
Got lost and extended the dive  
I went into conditions where I used more gas than normal  
I purposefully extended the dive

26. Why did you have an out of gas situation?

Not applicable  
I lost my buddy and couldn't find him  
I didn't pay attention to the leader  
I got lost leading the dive  
I got caught in current  
I was not able to come back to the exit point

27. Why and how did you get lost?

Not applicable  
I didn't service my private equipment  
I didn't check the rented equipment  
I didn't do a check before the dive and not everything was connected  
My equipment broke (fell apart) during the dive

28. What kind of equipment failure have you had, and why?

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 10 z 17

Not applicable

I was not prepared for that dive

I was not experienced enough for the dive

I didn't dive for a long time

29. Why did you have a panic situation?

Yes

No

Similar

30. Did you had the same near miss situation more than once? \*

OWD

AOWD

Rescue

Professional (Divemaster/ Instructor)

Tec training

31. What level of training did you have during the first near miss situation? \*

<10

11-50

51-100

101-200

201-300

>300

32. How many dives have you done till the first near miss situation? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 11 z 17

Yes

No

Was the first near miss situation a dive conducted with professional diving centre or instructor? \*

33.

Yes

No

34. Did you dive alone during the first near miss situation? \*

Yes

No

35. Were you aware that you could have problems during that dive? \*

I didn't want to lose the dive

Pressure from the dive group

I trusted professional conducting the dive

I didn't want to lose the money

36. Why did you conduct the dive thinking that you can have a problem during?

Yes

No

37. Did you have a direct buddy with you on a first near miss dive? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin=...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 12 z 17

Lower than me

The same level

The same level but higher experience

Higher level

Professional

38. What was the experience level of your buddy during that dive?

Yes

No

39. Were you aware of the danger during the first near miss situation? \*

Yes

No

I was informed about what could have happened after by other divers

40. Did you realize the danger after the first near miss situation? \*

Yes

No

41. Did your partner realized the danger during the dive?

Yes he helped

No he did not helped

42. Did your buddy reacted to the near miss situation

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 13 z 17

He didn't see that something was wrong

He didn't have the time to react

He had a problem of his own

He didn't care

43. Why didn't your buddy help?

Yes

No

44. Was the first near miss situation reported to anyone? \*

Diving centre

Diving federation

Dive boat owner

45. To whom did you report the situation to?

Yes

No

46. Did you consider looking for medical assistance after the first near miss? \*

Yes

No

47. Did you have diving insurance during the first near miss situation \*

DAN diving insurance

National security insurance

Other insurance company

48. What type of insurance did you have

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 14 z 17

Your actions after the near miss situation

Yes

No

49. Did the first near miss dive have any affect on you? \*

Yes

No

Yes for some time

50. Did you stop diving after the first near miss? \*

Yes

No

51. Did you change your diving habits after the first near miss dive? \*

Im always doing buddy checks

I started to check my gas more

Im choosing my dive buddies more strict

Im choosing my dive providers more strict

I changed my dive gear

I always take my private equipment on dive trips

I do more planning before the dive

I do better briefings before the dive

I added checklists to my routine

I service my gear regularly

Im more considerate about the dive conditions

Im more eager to cancel the dive if I feel something is wrong

52. How did you change your habits

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 15 z 17

Yes

No

I don't think so

53. Did the near miss situation teach you something? \*

54. What did the first near miss situation teach you ?

Yes

No

55. Did you consider doing higher courses after the first near miss situation \*

Yes

No

Maybe

Do you think your diving knowledge and skills during the first near miss situation was

adequate to the level? \*

56.

Yes

No

Did you ever go to another diver and try to help him before the dive, giving your near miss situation as an example? \*

57.

Yes

No

58. Did you ever see an similar situation happening to another diver? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 16 z 17

Yes

No

Multiple times

59. Did you ever hear about similar situation happening to another diver? \*

Near miss situation in diving in relation to diving education system 22.07.2024, 21:45

<https://forms.office.com/Pages/DesignPageV2.aspx?prevorigin...YmcZqV1UOTVVWjUxNVE1RUUzNjBLN1AyTDhXQkxWMS4u&analysis=false> Strona 17 z 17

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Microsoft Forms

### Your near miss situation

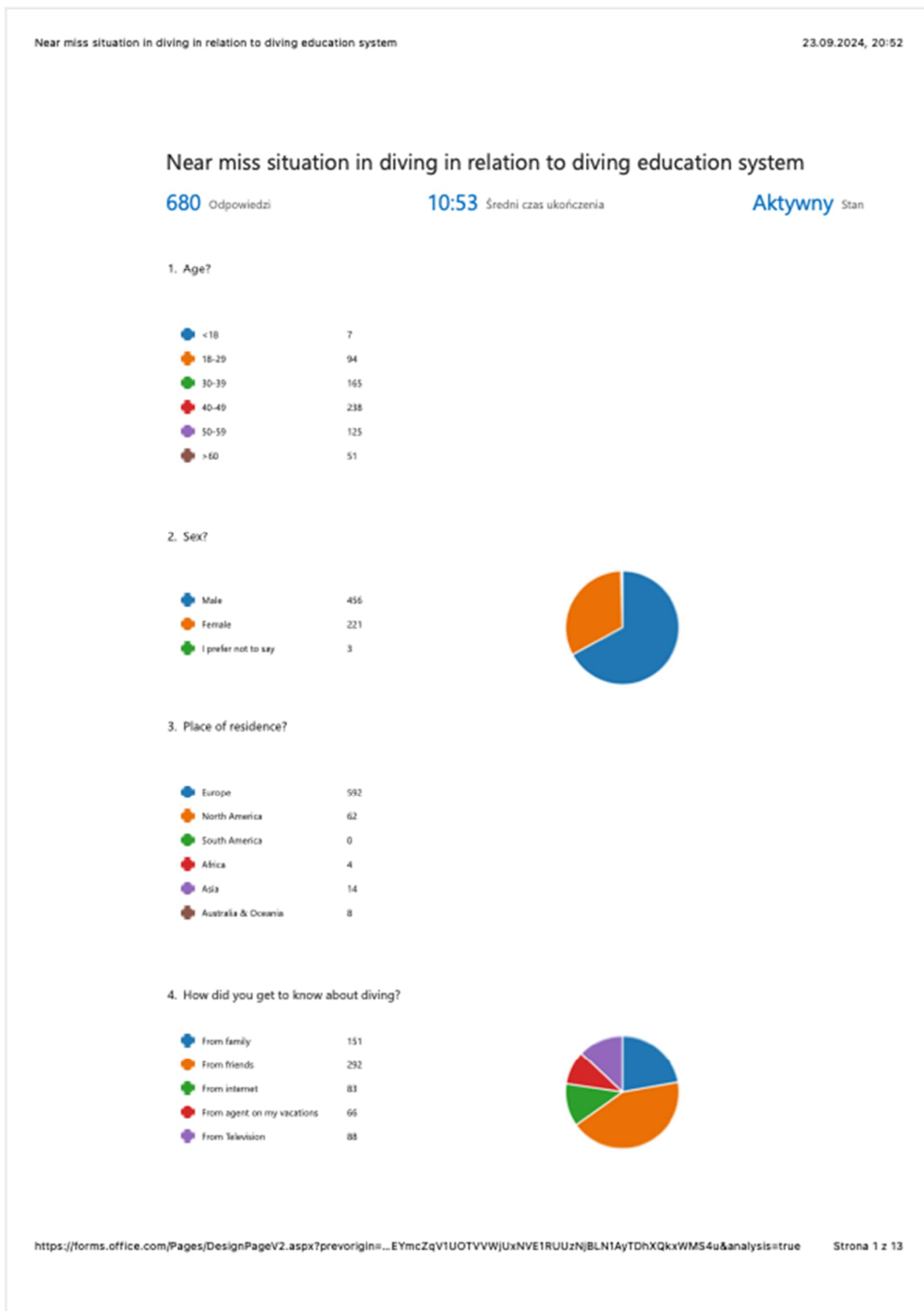
Could you recount in your own words your near miss situation.

This is optional if you don't want to elaborate click Submit

60. My near miss

Wprowadź odpowiedź

## Appendix 2: Answers for the questionnaire



5. At what age did you start diving?

680  
Odpowiedzi

Najnowsze odpowiedzi

\*16\*

\*43\*

\*19\*

34 respondentów (5%) odpowiedziało 30 na to pytanie.



6. Where did you start your diving education?

- In your place of residence 328
- Close to my place of residence 150
- On a trip in my country of resid... 38
- On a trip outside my country of ... 164



7. In what climatic conditions do you most often dive?

- Fresh waters (lakes, rivers, quarr... 254
- Salt waters warm (sea, ocean) 302
- Salt waters cold (sea, ocean) 124



8. In what visibility conditions do you most often dive?

- <5m/ 16.4 ft 221
- 6-15m/19.6- 49.2ft 212
- 16-30m/52.4- 98.4 ft 193
- >30m/ >98.4 ft 54



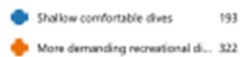
9. How long have you been certified for?



10. What type of diving do you most often do?



11. Recreational



12. Technical



13. What is your current level of diving training?



## 14. What diving federation you are certified with?

PSAI - Professional Scuba Associ...	24
CMAS - Confédération Mondial...	143
SSI- Scuba Schools International	184
HSA- Handicapped Scuba Assoc...	6
PADI - Professional Association ...	415
SDI/TDI -Scuba Diving Internati...	144
BSAC- British Sub Aqua Club	28
GUE- Global Underwater Explor...	39
IANTD- International Associatio...	124
Im certified in more then one di...	101
I.A.C- International Aquatic Club	6
Different	70

## 15. How many dives have you done till today?

<10	7
11-50	74
50-100	80
101-200	90
201-300	61
>300	364

## 16. How often do you dive?

Daily	68
Once a week	247
Once a month	158
Once a year	21
Few times a year	162
Less often	20

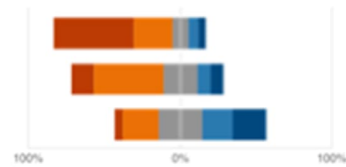
17. How often do you exercise?

■ Daily
 ■ Few times a week
 ■ Few times a month
 ■ Few times a year
 ■ I'm not doing any training

Light activity

Moderate activity

Hard activity



18. What type of physical activity do you do?

<span style="color: #0000FF;">●</span> Gym	265
<span style="color: #FFA500;">●</span> Walking	413
<span style="color: #008000;">●</span> Swimming	282
<span style="color: #C00000;">●</span> Running	168
<span style="color: #800080;">●</span> Aerobic	73
<span style="color: #808080;">●</span> Yoga	92
<span style="color: #FF00FF;">●</span> Different	293

19. How was your first diving course?

<span style="color: #0000FF;">●</span> I think it was good	564
<span style="color: #FFA500;">●</span> I think it was bad	76
<span style="color: #008000;">●</span> I have no opinion	36



20. Good

<span style="color: #0000FF;">●</span> I think I learned a lot	311
<span style="color: #FFA500;">●</span> My instructor took a good care ...	413
<span style="color: #008000;">●</span> I felt educated and prepared for...	296



21. Bad

<span style="color: #0000FF;">●</span> I feel like I didn't learn enough	46
<span style="color: #FFA500;">●</span> I felt overwhelmed with the kno...	12
<span style="color: #008000;">●</span> Instructor was not interested in ...	35
<span style="color: #C00000;">●</span> The tempo of learning was too f...	22



22. Did you have any near miss situation?

● Yes	320
● No	360



23. How many near miss situations did you have?

● 1	103
● 2	100
● 2-5	84
● >5	33



24. Chose the near miss situation that you had?

● Uncontrolled ascent to surface	106
● Out of gas situation	97
● Getting lost on dive	127
● Equipment failure	141
● Panic	68
● None	82

25. Why did you have an uncontrolled ascent to the surface situation?

● Not applicable	177
● I lost my balast	11
● BCD problems	17
● Escaping to the surface	11
● Problems with controlling my b...	52
● None	51

## 26. Why did you have an out of gas situation?

Not applicable	190
I didn't check my gas during the...	15
I had a gas leak	12
I was blindly following the leade...	16
Got lost and extended the dive	7
I went into conditions where I u...	35
I purposefully extended the dive	10
Inne	42

## 27. Why and how did you get lost?

Not applicable	157
I lost my buddy and couldn't fin...	48
I didn't pay attention to the lead...	10
I got lost leading the dive	32
I got caught in current	38
I was not able to come back to t...	44
Inne	38

## 28. What kind of equipment failure have you had, and why?

Not applicable	151
I didn't service my private equip...	8
I didn't check the rented equip...	11
I didn't do a check before the d...	15
My equipment broke (fell apart)...	96
Inne	46

## 29. Why did you have a panic situation?

Not applicable	215
I was not prepared for that dive	18
I was not experienced enough f...	28
I didn't dive for a long time	2
Inne	45



30. Did you had the same near miss situation more than once?

Yes	53
No	244
Similar	23



31. What level of training did you have during the first near miss situation?

OWD	81
ACWD	98
Rescue	39
Professional (Dive master/ Instruktor)	43
Tec training	41
None	18

32. How many dives have you done till the first near miss situation?

<10	51
11-50	85
51-100	63
101-200	37
201-300	29
>300	55

33. Was the first near miss situation a dive conducted with professional diving centre or instructor?

Yes	160
No	160



34. Did you dive alone during the first near miss situation?

Yes	29
No	291



35. Were you aware that you could have problems during that dive?

Yes	52
No	268



36. Why did you conduct the dive thinking that you can have a problem during?

I didn't want to lose the dive	15
Pressure from the dive group	6
I trusted professional conduct...	18
I didn't want to lose the money	1



37. Did you have a direct buddy with you on a first near miss dive

Yes	40
No	12



38. What was the experience level of your buddy during that dive?

Lower than me	8
The same level	14
The same level but higher exper...	4
Higher level	6
Professional	8



39. Were you aware of the danger during the first near miss situation?

Yes	219
No	100



40. Did you realize the danger after the first near miss situation



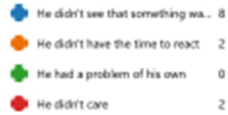
41. Did your partner realized the danger during the dive?



42. Did your buddy reacted to the near miss situation



43. Why didn't your buddy help?



44. Was the first near miss situation reported to anyone?



45. To whom did you report the situation to?



46. Did you consider looking for medical assistance after the first near miss?

Yes	24
No	295



47. Did you have diving insurance during the first near miss situation

Yes	209
No	110



48. What type of insurance did you have

DAN diving insurance	138
National security insurance	21
Other insurance company	50



49. Did the first near miss dive have any affect on you?

Yes	165
No	155



50. Did you stop diving after the first near miss?

Yes	5
No	307
Yes for some time	8















51. Did you change your diving habits after the first near miss dive?

Yes	231
No	84



## 52. How did you change your habits

	In always doing buddy checks	53
	I started to check my gas more	40
	In choosing my dive buddies m...	59
	In choosing my dive providers ...	31
	I changed my dive gear	54
	I always take my private equipm...	60
	I do more planning before the d...	88
	I do better briefings before the ...	61
	I added checklists to my routine	39
	I service my gear regularly	38
	In more considerate about the ...	95
	In more eager to cancel the div...	83

## 53. Did the near miss situation teach you something?

	Yes	292
	No	14
	I don't think so	14



## 54. What did the first near miss situation teach you ?

	Inne	257
---	------	-----



## 55. Did you consider doing higher courses after the first near miss situation

	Yes	217
	No	103



## 56. Do you think your diving knowledge and skills during the first near miss situation was adequate to the level?

	Yes	217
	No	61
	Maybe	42



57. Did you ever go to another diver and try to help him before the dive, giving your near miss situation as an example



58. Did you ever see an similar situation happening to another diver?



59. Did you ever hear about similar situation happening to another diver?



60. My near miss

214  
Odpowiedzi

Najnowsze odpowiedzi

"Buddy and I were separated in low vis wreck dive. We followed proper lost buddy pro...  
"My tank loosened and fell below me pulling the reg from my mouth. Couldn't figure o...

109 respondentów (51%) odpowiedziało **dive** na to pytanie.

minutes into the dive night dive dive under a long deco dives  
tanks to another dives second dive course together with my dive  
starting dive dive buddy **dive** end of the dive buddies diving  
shallow dive dive group Dive instructor dives experience  
dive did another wreck dive guide dives those are the closest dive spot

### Appendix 3: Detailed answers for question nr 53

1	anonymous	Always be prepared for changing situations underwater
2	anonymous	To be more aware of your surroundings, and to always choose the "right" buddy for the type of dive, especially if you are doing photography dives.
3	anonymous	It's okay to getting panicked in your first dive cause of your personal restlessness
4	anonymous	Danger can be anywhere under the surface of the ocean, at 1m or 100m, it doesn't matter how good you think you are, respect the environment you're diving in
5	anonymous	Stop, breath, think, act
6	anonymous	Don't follow the lead diver while running low on gas even if the dive has less than 5 minutes left and you're in less than 5m
7	anonymous	Always keep your dive buddy in sight.
8	anonymous	To use a Compass when diving
9	anonymous	Keep bouancey control when using dry suit
10	anonymous	Zawsze coś może pójść niezgodnie z planem
11	anonymous	If the dive leader doesnt pay attention to you prior to the dive be extra cautious during the dive or chose an alternative leader
12	anonymous	Stress control
13	anonymous	Triple check everything
14	anonymous	Knowing how much time do I have based on gas left and not to panic when you have the time
15	anonymous	nothing

16	anonymous	Check cable ties and if a buddy team decides to leave their guide it's their responsibility to conduct their own dive.
17	anonymous	Correct configuration
18	anonymous	Getting lost is easy, it's also always easy to fix (surface if needed)
19	anonymous	Always lay a line in wrecks
20	anonymous	It was not an option in q42, i basically took retraining from start to finish with 2 reputable instructors. Cost me a fortune, but it actually hurts more to have to pay twice for training. You peanuts you DO get monkeys.
21	anonymous	Plan diving, dive according to plan
22	anonymous	Be prepared for the worst every dive
23	anonymous	Przede wszystkim pokory 😊. To był punkt zwrotny w moim rozwoju nurkowym. Od tamtego czasu zacząłem się szkolić, ćwiczyć, inwestować w odpowiedni do warunków sprzęt.
24	anonymous	That the only person responsible for me, is me. To check the conditions and make sure they're what I am comfortable with. That instructors should do better and teach better.
25	anonymous	Patrzeć na to czy kończy się powietrze i pytać regularnie partnera czy u niego też ok, szczególnie że mój brat wysysał zwykle dwa razy szybciej niż ja
26	anonymous	Plan lost gas situation
27	anonymous	Better preparation
28	anonymous	So not trust your instructor
29	anonymous	Check if the guide is really certified as a profesional diver
30	anonymous	I need more weight
31	anonymous	Not to trust your dive coordinator/buddy, and to explicitly ask about what their plans are - they won't always tell you if you don't ask
32	anonymous	humility and "respect" for water

33	anonymous	Always be prepared for a change in surface conditions even when unexpected
34	anonymous	check everything before and during dive, take responsibility of me and the group
35	anonymous	Many problems can be solved underwater or eliminated before the dive. Unfortunately many divers aren't honest if they are not feeling well or something is wrong and I have experienced a few dive buddy losses (general, not during a dive) due to me strictly canceling dives if more than three things go wrong during preparation.
36	anonymous	sprawdzanie umiejętności partnera, przed trudnym nurkowaniem
37	anonymous	Don't completely rely on the guide, be self sufficient and able to handle situations
38	anonymous	Monitor the current conditions
39	anonymous	Check every Tiny piece of equipment
40	anonymous	I correctly completed the roll as in was ascending feet first in a drysuit however I had not positioned my arm well enough to allow the air to escape from the wrist dump. This situation taught me to rely on my now wing for buoyancy and drysuit inflated just enough to avoid suit squeeze
41	anonymous	Zawsze bądź wypoczęty i sprawdzaj sprzęt
42	anonymous	Never give in to peer pressure, do your checks properly, follow proper procedure at ALL times.
43	anonymous	To take training seriously, choose my instructors for their advanced diving skills, choose my buddies well
44	anonymous	Always train a bit for emergency Situations.
45	anonymous	Check equipment better
46	anonymous	Not to dive with some people
47	anonymous	Be more wary of conditions and pay more attention to where the exit is

48	anonymous	Never try to get on boat without holding the line when the waves hit and the current is blowing you off, wait to be picked up by the boat while holding the rope from the safari boat
49	anonymous	be honest. Talk to your buddies. Tell them about bad Situations you have experienced. buddy awareness is a MUST!
50	anonymous	Free-flows can happen even with cold-water equipment if you put it under enough stress
51	anonymous	Użyć kołowrotka przy złej widoczności
52	anonymous	I can only rely on myself and no one else. No matter what happen.
53	anonymous	It is always good to be near your buddy and plan better dives
54	anonymous	Trust the compass
55	anonymous	Don't panic
56	anonymous	to cancel if not ok to dive
57	anonymous	That narcosis is very real and can happen out of the blue even on dives and depths you've done many times
58	anonymous	Look after myself out of the water better (get more sleep!)r. Just because I feel fine to dive doesn't mean I am
59	anonymous	Be more careful
60	anonymous	If you have to walk a long distance before you can enter the water do another pre dive check.
61	anonymous	To be more aware of gas distribution in my drysuit to control my ascents
62	anonymous	Stick to the basics. Mark the cylinder with mod. And check the mod when switching gas
63	anonymous	Check your material
64	anonymous	DPV and poor visibility increase buddy separation risk, especially larger teams.
65	anonymous	A combination of small problems can add up into one very large one
66	anonymous	Importance of buoyancy in the ocean with boat traffic around

67	anonymous	Not to be overconfident
68	anonymous	If I have long gaps in between dives, do a refresh course. Slow down and keep calm. And keep diving and learning to be a better diver.
69	anonymous	I need to be more confident in my weighting needs.
70	anonymous	Strictly follow ccr checklist
71	anonymous	More consideration of conditions and adjust accordingly (strong underwater currents)
72	anonymous	Recognizing symptoms of CO2 retention
73	anonymous	But more Routine in checking my setup
74	anonymous	take a class to learn how to use drysuit properly
75	anonymous	Always use gear you can trust
76	anonymous	I learned that regulators can freeze.
77	anonymous	No one is infallible
78	anonymous	being more careful in choosing a diving partner and limited trust in what the instructor says.
79	anonymous	practicing procedures is effective.
80	anonymous	That I need more/better training from better agency
81	anonymous	Be ready with a regulator in the mouth before getting near the water when there is a swell
82	anonymous	Stay calm
83	anonymous	It was during an exercise provoking that exact scenario.
84	anonymous	Cold water equipment fails in warm water
85	anonymous	December diving is problematic
86	anonymous	Redundancy
87	anonymous	Always line in. No excuse.
88	anonymous	Always check LP connections
89	anonymous	Self confidence
90	anonymous	to take my time on a boattrip
91	anonymous	Don't be an idiot, and that diving truly has no care whether you come out alive

92	anonymous	Don't be complacent
93	anonymous	Be always prepared for anda Situation
94	anonymous	It made me consider my buoyancy control
95	anonymous	That anything can happen without warning.
96	anonymous	Air consumption in difficult situations is more than twofold
97	anonymous	breathing is crucial
98	anonymous	That deep air is too risky
99	anonymous	Be more weight conscious in comparison to exposure suit
100	anonymous	Oddychaj swobodnie
101	anonymous	To ask your divemaster if you have any concerns. To use guide line if it's necessary. To not do tight penetration if you dont have proper training
102	anonymous	To stay calm, and do not exceed my limits
103	anonymous	familiarity breeds complacency
104	anonymous	Shit can happen even if i am prepared, especially in Hancza and with rented gear
105	anonymous	Diving in a different temp to normal changes air consumption
106	anonymous	Air movement within the bcd
107	anonymous	To check the gas
108	anonymous	Never assume anything works unless you've specifically checked it
109	anonymous	The need of stronger buddy system and in briefing procedures in case of bad visibility
110	anonymous	taught me to watch where you swim
111	anonymous	always prepare for the worst situation
112	anonymous	Trust yourself.
113	anonymous	Equipment familiarisation
114	anonymous	Way of breathing is crucial
115	anonymous	Check conditions
116	anonymous	Chose schools better, stay closer to dive buddies when in a very tourist place

117	anonymous	better preper for dive
118	anonymous	Use lines
119	anonymous	To keep calm
120	anonymous	Don't dive when you feel unwell
121	anonymous	Always follow the rules and don't "cut corners"
122	anonymous	To be more alert
123	anonymous	Have more back up equipment and signaling device
124	anonymous	I learned that I don't have to be shy to tell that I AM on nad condition. I learned note to give up either
125	anonymous	Confirm gas consumption for all dives
126	anonymous	To check better my gear
127	anonymous	Proper balancing is the key
128	anonymous	That even with proper planning things can go sideways
129	anonymous	better pre dive checks, I can handle some problems uw
130	anonymous	monitor air
131	anonymous	Looking for new tank
132	anonymous	Me and my buddy was taught to open the valve and turn it a half turn back. She closed the valve and opened it a half turn. I'm now an instructor and teach everyone to open the valve all the way telling that story.
133	anonymous	Always stay calm and think how to solve the problem.
134	anonymous	How to calm down, and ask others for support
135	anonymous	Pilnować prognozy pogody
136	anonymous	Panic is pamic, you have to good buddy in diving
137	anonymous	Stop, calm down, think how to find solution
138	anonymous	Buoyancy control is hard to regain once it's running away from you. So take care of buoyancy early when ascending

139	anonymous	buoyancy is a primary skill, excluding constant breathing
140	anonymous	Pay attention to surroundings
141	anonymous	thorough checks before the dive; be prepared for the worst, practice emergency drills frequently
142	anonymous	Stay calm
143	anonymous	Dive checks are vital
144	anonymous	Swim slower you can over breath a ccr more easily than you think, 2. What actually causes a caustic cocktail is widely misunderstood 3. Performing SCR on lean dil massively racks up deco
145	anonymous	Purge before trying to breathe off a deco bottle!
146	anonymous	Posiadać własny sprzęt. Sytuacja z dry suite
147	anonymous	Check not only your gear, but buddies as well. Constantly communicate with remaining oxygen levels
148	anonymous	Buddy awareness is so important
149	anonymous	To be always on time, beautiful things can be missed
150	anonymous	To practice skills so I won't blindly react
151	anonymous	Be self relying diver
152	anonymous	To always make sure that my mask skirt is not partially on top of my hood
153	anonymous	To don't swim as fast as I did it in te previous dives
154	anonymous	Don't change anything with what you are wearing with out doing a weight check.
155	anonymous	That sometimes current is very strong and you can't do anything but follow the procedure - that save us
156	anonymous	do buddy checks, watch buddy, do not delay surfacing if you lose your buddy
157	anonymous	Pre-dive checks
158	anonymous	Nie panikować

159	anonymous	Always be prepared for near miss situation
160	anonymous	nie ustawiać balastu na oko
161	anonymous	Always check equipment
162	anonymous	1. Do not dive out of your training with someone outside training course; 2. Do a cave course
163	anonymous	That panic can always happen and you can't allow it
164	anonymous	None of the options in 42 explain what followed. Essentially, rather than hanging the deco gas on a line, I started carrying the deco gas.
165	anonymous	Jeszcze większe sprawdzanie innych nurków
166	anonymous	To be very critical on the team formation and on the dive plan including emergency plans.
167	anonymous	Never dive in the ocean. Get into the caves instead!
168	anonymous	To be more responsible and make sure i know what im doing before getting in the water
169	anonymous	Influence of current at that dive site. Always bring plenty of gas (I dive twinset even on rec. dives)
170	anonymous	Be more careful, check people's logs and ask more questions about previous dives and training
171	anonymous	Hypercapnia happens without much warning
172	anonymous	Carefully planning and briefing
173	anonymous	Check twice, check again, check everyone, discuss, sync with others, educate
174	anonymous	Be more carefull
175	anonymous	Be ready for something to happen
176	anonymous	Check your gear
177	anonymous	To have tripple backup
178	anonymous	Prevention is better than rescue

179	anonymous	Always be aware of surface conditions and stay clear of the diveboat until you're ready to get out
180	anonymous	Awarenes
181	anonymous	Than gear that I know and I'am really comfortable with can play with you as well.
182	anonymous	that something can always happen and you should be prepared to act and not to panic
183	anonymous	Check wether valve is fully open
184	anonymous	Broaden your view to see where the group is turning
185	anonymous	Not to do the quarter turn back on a tank.
186	anonymous	Respect for water
187	anonymous	Not to act hostilely
188	anonymous	open the tanks completely
189	anonymous	Respect
190	anonymous	Checkin equipment more carefully
191	anonymous	Refresh drills regularly
192	anonymous	looking after myself
193	anonymous	The dive on submarine I should not have done in some else dry suit. I should have deployed my SMB so listen to your gut
194	anonymous	Sprawdzenie sprzętu
195	anonymous	To be calm and react correctly will save your life
196	anonymous	Diving is "Life Safety" respect that; train for problems not for perfect conditions
197	anonymous	I answered yes because I didn't dive yet after the situation but I'm planning to
198	anonymous	To not let others confidence outweigh your experience
199	anonymous	To be more aware of the surroundings
200	anonymous	Carry a PLB device or any other form of location beacon
201	anonymous	Shit happens! Also the need to plan better.

202	anonymous	Take it easy no stress
203	anonymous	Being patient to details. Always checking your gear
204	anonymous	Make sure issues are communicated before they become problematic.
205	anonymous	Regular equipment servicing
206	anonymous	Train harder
207	anonymous	Don't Trust people bragging about their experience
208	anonymous	Buddies (redundant air) are important.
209	anonymous	Komunikacja, planowanie, omówienie po
210	anonymous	Always look what the others are doing
211	anonymous	Less weight = less air in the jacket = less problems with buoyancy
212	anonymous	Always have your own complete gear and do not rely on a dive master for assessing current situation.
213	anonymous	Remember to clear regulator when filled up with water
214	anonymous	Don't be complacent
215	anonymous	Where to look. I think a contributory factor was poor visual conditions which led to my eyes losing focus.
216	anonymous	It can happen, be prepared
217	anonymous	Stay calm and breathing
218	anonymous	Consider not diving or abort a dive if not comfortable
219	anonymous	Always keep calm
220	anonymous	Guides and diving instruct (especially in hot country) often have large experience but pure knowledge and imagination about risk situation. Never dive with single tank. Even in shallow and hot water. This tank could be for me or other diver in group.
221	anonymous	Don't be afraid to ask buddies /instructors what they think the problem could be

222	anonymous	To speak up
223	anonymous	Never trust your ccr. Always have extra redundancy on your computers
224	anonymous	Yearly have your Regs inspected. My buddy didn't and I had to assist him because of a 1 stage failure.
225	anonymous	Keep an eye on my buddy always
226	anonymous	Nigdy nie rozłączać teamu podczas nurkowania. Jak zgubisz buggiego to po minucie wynurzenie
227	anonymous	To stick to the plan and check weather carefully

#### Appendix 4: Detailed answers for question nr 60

1	anonymous	Out of gas —. Deco stop
2	anonymous	The first near miss was getting lost during a dive. The instructor had two DSD clients (and was leading them via tea-bagging, so he didn't have any free hands) and I was just tagging along to take some pictures. I was fairly familiar with the site (a wall dive) but definitely realize now I had a big ego thinking nothing could happen, and not taking into account my own inexperience in diving. Since I had higher certs (and the ego), I went deeper than the others to take pictures and was so focused on doing that, that I didn't realize they had swam around the corner on the wall. In a brief panic moment I looked around and up very quickly and decided to swim straight back to the entry point, where I had to do my safety stop. While doing the safety stop my breathing had calmed down and I realized I could have gone the other direction first to check if the others were there. I was later informed by the instructor, that my 360 check was not right and that he could still see me and the whole scene of me losing them and panicking.
3	anonymous	It was my first dive. Felt very weird and maybe claustrophobic. Got panicked. My instructor grabbed me and holded me in the same place securing that I had my reg on.

4	anonymous	I was diving sidemount and at the end of the dive I did my safety stop and was cleared but I stayed a little bit longer in the shallow looking at corals and I inadvertently moved away from my assigned buddy and he probably didn't care. I noticed that the cylinder I was breathing from was very low and I thought it'd be a valuable teaching experience to actually experience taking a last breath... I took it and quickly switched to the other regulator but just a few breaths in I realised the other cylinder was completely out too so I basically rushed to the surface from about 6 or 7m. It was stupid and foolish of me and it's never happened again. Hundreds of dives into my career and I'm a much better and responsible diver. I also avoid diving with people I don't know if I can help it. I also only do tech dives with my trusted buddies. I hope I was of help. Luciano from Sydney, Australia
5	anonymous	First deep dive, in the blue, over 40m down with the instructor well below me. Started hyperventilating, wanted to remove my reg to breathe. Looked up to shoot to the surface but decided against it. Went back up to high 30s, started breathing deeper and got situation under control. Continued the dive, was met up by the instructor on his way back up. He never knew what happened.
6	anonymous	1. First few dives, was following my dad he had an 18L I was running a 15L we were in the shallows in less swimming to the ladder and all of a sudden no gas. 2. Was eager to go down forgot to check the pressure gauge while kitting up 2 minutes into the dive I have a look at my pressure gauge and I'm on 50 bar turned the dive around made it back safely with air left to spare.
7	anonymous	To much to recount
8	anonymous	The first near miss was mainly lack of proper buoyancy control which then became better with further training.
9	anonymous	Unctrolled ascent to surface from approx 25 mtrs, air stuck in feet of dry suit
10	anonymous	Drysuit leaking during second dive of drysuit suit course. Dive instructor was not attentive before and during dive when suit leaked and dive assistant at the bawk had to provide emergency exit protocol as i started sinking
11	anonymous	BCD DID NOT INFLATE WHEN I WAS 23M DEEP
12	anonymous	First - buoyancy trouble with drysuit, but a few others ranked up, Worst was loss of BCD buoyancy on a wreck dive at 60m, with not enough training at that point.
13	anonymous	Lost ballast in overhead environment in zero visibility
14	anonymous	Had a group at a deeper wreck. A buddy team decided to carry onto the wreck whilst I dealt with ear issues on another diver. Knew the buddy team were not strong. I reached them and one had 60bar at 49m. Made way back to line with diver on alternate. At safety stop my mouth piece came off.. a colleague came to my assistance
15	anonymous	??

16	anonymous	- lost at anchor bay, felt something wasn't right but wouldn't admit it to myself, continued going too long before surfacing and having a long surface swim back - anchor dropped on p29, buoys now installed after many complaints to PDSA secretary (who dropped anchor) - jet ski miss at Tug 2, driver was a tourist who loudly shouted to his friend let's try to hit the buoy where we were doing skills - boat near miss in Inland Sea Tunnel, students/customers losing control when shallowing up - fishing hooks caught on equipment at both Wied iz Zurrieq and Cirkewwa left reef causing partial ascent before detatching - hose split on a shallow dive at anchor bay, managed to use buddies alternate until safe to ascend and snorkel home. There are probably others but across the 5000+ dives those are the closest calls and memorable moments but all have led to lessons learnt and thankfully no major issues or fatalities
17	anonymous	Lost in a wreck and silted out
18	anonymous	Already covered
19	anonymous	Lose a Buddy in poor visibility
20	anonymous	I had a free flow of my diluent during training, which we where actually simulating but then it was for real. On another not very often my buddies ran out of air. Also lost my buddy many times.
21	anonymous	Zalodzony automat na 40 m w ciemnym jeziorze, kiedy ta sytuacja została opanowana, niekontrolowane wynurzenie. Opanowane przez spłyniecie w dół i rzucenie gazu z bcd. Opadnięcie na dno, tumany mułu w końcu panika i potrzebna pomoc przy wynurzeniu na powierzchnię. Dzisiaj już wiem, niedostateczne umiejętności i doświadczenie, sprzęt (głównie automat niedopowiedni na zimne wody). Pianka co prawda 2 x 7 ale dzisiaj to przede wszystkim suchar. Ponadto aktualnie dla mnie 40 m w zimnej wodzie to minimum twinset. Mam nadzieję, że moja historia, którą opowiadałem Tobie osobiście przyda się do Twojej pracy. Powodzenia 🐳, Szymon Kędziński
22	anonymous	During my OW course, the instructor was not really interested in teaching. More interested in his gf who was at home. The sea looked calm, shore dive. We dropped down, about 10 minutes into the dive you couldn't see your hands in front of your face. Couldn't see the other student. Couldn't see the instructor. We had not yet been told what to do if we couldn't find anyone, ie. Return safely to the surface. The instructor had no torch, no form of being able to communicate with us. Rarely checked on us. Was just an awful experience. I was scared at the time, didn't know what to do. I never wanted to be in that position again, or have someone else in that position. So I continued to learn how to dive, how to be safe, how to look after me and my buddy. When I was teaching, I made sure to explain what to do if there was ever an emergency and the importance of your buddy.
23	anonymous	Lost ean50 regulator while my buddy had different gas plan and deco obligation
24	anonymous	Out of gas sit / getting lost

25	anonymous	<p>Both near misses I've had related to unexpected currents. The first one I would have been aware of and taken into consideration if communication had been clearer, and a better plan had been laid beforehand. I felt pressured to not ask too many questions and to just get into the water as quickly as possible. Communication underwater was also lacking because we hadn't made clear what hand signals we were using (I was taught a different system than the others for relaying gas remaining). Hence, after confusing communication, I expected us to surface more directly than we did, and ended up at risk of being pulled away from the group by the surface currents. My dive buddy at this point let me know what his plans were, and we promptly followed him to the ascent location. Subsequently, I stopped diving for a few years because I was too rattled by the pressure I felt surrounding that dive, the continual lack of communication and the mistakes that were then made on that dive. The second time was a few years later at the same location, but the danger came as a complete surprise to us all, as currents came abruptly at a place that is typically very calm at the given depth. Luckily, we all remained calm and alert and helped one another out. We had planned well beforehand, kept eyes on each other and reacted quickly, so nobody got lost or harmed, and the danger therefore passed within a few minutes.</p>
26	anonymous	<p>Entry to the Um El Faroud for a second dive, only myself and one other diver, conditions had been calm all morning with no expected change. Upon surfacing from the second dive the waves and swell had increased massively, I helped my diver to the ladder (which wasn't attached at the bottom so was moving in and out with waves) she started to climb the ladder but she was a smaller lady. A wave knocked her under the ladder and she was stuck between the ladder and the reef wall and she spat out her regulator. I grabbed her reg put it in her mouth and purged, then grabbed her by the BCD and grabbed the ladder to take her from under it. Then emptied both BCDs to descend slightly, calmed her down then went to an alternative exit. Which still wasn't easy to get out but a lot safer than the ladder</p>
27	anonymous	<p>Thankfully, i didn't have a recent miss.</p>
28	anonymous	<p>Just about two weeks ago I was on a diving medical course together with my dive buddy and we wanted to dive in the local lake before leaving. During preparation I noticed that he didn't have a drysuit inflator in his setup and as I told him about it he just said he'll connect the BCD-inflator to his drysuit and orally inflate the BCD. Unfortunately I let him convince me and gave in, didn't cancel the dive. In the water his dry glove started leaking but he didn't mind, wanted to continue and got quite angry from my suggestion to cancel. Of course he didn't manage to hold his buoyancy and when I tried to help by holding him, I got pushed away. At 10m I wanted us to maintain level to make the dive safer but I got ignored. A few moments later my buddy then descended quite uncontrollably until he hit the bottom at 25m. By the time I got down to him, I just saw a huge cloud of air bubbles and how he started bolting for the surface. I put up my DSMB and started ascending safely on the spot, luckily my buddy was alright and didn't even get any DCS symptoms. To put it short: always dive using proper gear &amp; gear configuration and if one is willing to call the dive, CALL IT OFF, no matter how unfortunate it may be. No dive is worth taking unnecessary risk.</p>
29	anonymous	<p>dwa zespoły 2 osobowe, nurkowanie jaskiniowe. Małe umiejętności jednego nurka, zamieszanie, brak komunikacji, nieracjonalne zachowanie. Zakończenie nurkowanie przed czasem.</p>
30	anonymous	<p>First near miss was being swept off a wreck and dragged deeper than I was qualified.</p>

31	anonymous	Mouth piece of the regulator detached during first 17 second of my dive and I inhaled water.
32	anonymous	<p>My first near miss was a result of air being trapped in the feet of my drysuit. I had completed all my training from BSAC Ocean diver and was enjoying the first or second weekend away with the club so was not very experienced. When i was rising to the surface i correctly completed the roll to orientate me correctly however i hadn't positioned my wrist dump in very good position so it did not dump or the valve itself got stuck either was possible but this was at least 10 years ago now. My second near miss was only last week. Post covid diagnosed with anxiety due to working in healthcare and everything we saw/went through. Have been previously felt anxious before dives but always let people know and never had an issue before. This dive was on the Thistlegorm and following the diveguide as i was unfamiliar with the ships layout and just before penetration from the destroyed section to travel to hold 3 i experienced sudden onset of panic and did a quick 180 and exited to open ocean. I remained at the same depth and took about 2 minutes to slow breathing and calm myself down which was successful. Unsure as to what caused/triggered this incident. The dive was aborted at this time. I later completed the penetration of the wreck by descending directly into the holds and on a later dive did another wreck penetration again following the guide without any sense of panic.</p>
33	anonymous	<p>Dostałem ataku paniki spowodowanego ciemnością na głębokości około 40 m, a następnie zamroziłem automaty, byłem zmęczony, nie wyspany przed nurkowaniem</p>

34	anonymous	<p>Location: Gulf Fleet wreck Red Sea, Sha'ab Ruhr Umm Gamar Date: December 2nd 2022, 11:53 AM Start time: 11:53 AM End time: 1:28 PM Dive length: 1h 34 min Team briefing: nothing formal, gas planning a couple of nights before with V., asked for a max END of 40m. Did not account for O2 narcosis. Dive lead: V. Previous experience: M. dove Gulf Fleet in 2021 w/ H. (same configuration, no travel gas), V. several times over the past years (JJ CCR). Pinnacle dive for F. (no CCR Trimix certification) and A. (less than 10 dives lower than 60m, excluding training dives). Dive plan: descend as fast as possible to wreck, 3-5 minutes bottom time (10 minutes total descent and bottom time), ascend slowly and briefly survey the Colona IV (~60m) upon return. Approach wreck from starboard, dive underneath and across wreck at MOD 102m towards portside, slowly ascend to inspect deck &amp; crane, as well as captain's cabin if timing allowed. Type of dive: zodiac entry (departing from safari boat). Return to the safari boat. Weather and water conditions: sunny, windy, 28 degrees Celsius air temperature, 0.5m waves, water temperature - 24 - 28 degrees Celsius, average temperature 25 degrees Celsius, visibility ~20m. A.'s perspective (in red A.'s mistakes) Dive planning: Gas checks, gas calculations (A.'s O2 @ 130bar, asked for top-up, 170 bar - not enough O2). Plans included turning over 2 DPVs and 2 EAN50 tanks to another dive team who was supposed to meet us at 6m deco stop before their dive to the Colona IV (~60m). Entry: First M. &amp; A., w/ stages, DPVs and oxygen tanks provided in-water by boatman. Down to 5m for regs, stages re-pressurisation and bubble check. Next V. &amp; M., w/ stages, back-mounted CCRs, DPVs handed in water. No S-drills, no team check on the surface, no team check @ 5m, ok confirmed across team. Dive report: Slowly descended after go-ahead at 5. A. consistently 10-15m above dive lead to save air (gas consumption concerns based on recent experience - very high SAC when hyperventilating), did not understand when dive lead was calling for the team to stay closer together. At least 10-15m across all axes between divers. Did not establish order of divers on the surface, did not go into formation once the descent had started. Gas switched from travel to bottom @ 68m (Ana), switched alone to necklace 2nd stage instead of long hose. Did not check for long hose stow/availability/ease of reach. Travel gas stage was badly configured (2 left posts instead of left-right post for 11.11 stages, configuration done on deck the same morning was erroneous). Stages were not held by bungees, left to hang on the sides. Arrived at the wreck after ~ 11', way behind initial plan. Descent rate much lower than predicted. No equalisation problems. DPV speeds 1-3, consistently throughout the dive. V. approached the wreck as planned, A. followed closely behind, F. and M. 2-3 m behind. Once under the wreck, A. turned head to left side and up to inspect wreck bottom, regulator mouthpiece separated from 2nd stage, regulator flew behind (necklace 2nd stage). Aspirated a small amount of water. Light moved from right to left hand and signalled vigorously to the dive lead, who turned to assist momentarily. Right hand looking for long hose 2nd stage, which was caught between the travel stage valve and body. Managed to grab 2nd stage and breathe, exited overhead and ascended quickly to 80 m (15' into the dive) and stood by the mast to recompose and slow breathing rate (until 17', when the other divers finished deck inspection). The other 3 members on the team stayed on deck, none aware of what occurred with the exception of V., who validated 2-3 times from 5-10 m that A. was ok before resuming wreck survey. At one point M. was 10m lower than A., he was arranging stages, A. waited above and watched in case assistance was needed. Ascended towards the Colona IV still breathing bottom gas, A. did a gas switch to travel gas at 51m (22' into the dive, 80 bar left in t</p>
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35	anonymous	<p>Dive with instructor shortly after finishing my AOD. I was aware my level of mastery of buoyancy was bad, especially on ascend, staying down the few last meters. I mentioned that to the instructor. Dive site was in Zurrieq, Malta, it is a very narrow bay with lots of boat traffic. We have to cross the bay at beginning and end of dive. Instructor chose, mostly because all divers were low on gas, to ascend to 3 meters and cross at that depth (exactly what I wanted to avoid when I mentioned my buoyancy mastery was bad). We were diving as a group, with instructor far in front, then all divers at more than buddy distance of each other. I surfaced in the middle of the bay. Nothing happened. But there could have been a boat, and I felt "lucky". Didn't want to ever feel "lucky" again during a dive, so I pushed my diving training to make sure I was mastering the basics, did an ISE Basics of Exploration course with a technical 10'000+ dives experience instructor. And since, I always speak about my near miss, especially to people who want to learn diving, so that they choose wisely their instructor. My second near miss is not really one... it was just not finding the dive site because of currents, buddy diving just with a (wise) friend. We decided after a bit more than the time we were used to find the wreck, and before reaching any gas limit, to come back (abort dive) because of the currents. This was at a stage in my diving experience were I was considering going for solo diving. And this dive stopped me doing it because I felt that just having a buddy there to help one be sure of their "somehow off" feeling is essential. Having a buddy also helped me not go into panic mode. Thanks for doing this much needed study! Comment on my diving experience... I was then diving weekly, but now I don't dive more than 1/year or so, because I don't make time for it any more, and because it sometimes causes me migraines (that I want to investigate before diving more).</p>
36	anonymous	<p>My Inflator hose was somehow bad (you didn't see before, i checked) and ripped off at the connection. So the bottle was empty in a few seconds.</p>
37	anonymous	<p>Too many to recount not mainly to me but to divers I led or taught. These near miss situations can happen on any dive even with buddy checks and gas monitoring. Proper planning keeps the situation at a near miss so when something does go wrong the situation is handled by the buddy pair or by myself as the guide/instructor.</p>
38	anonymous	<p>That was during deep course, it was our first dive on 40m in the lake. We were group of 4 noobies with two instructors. It was really dark and cold and visibility up to 1-2m. One of noobies lost his mind on 40m and instead of being still near the platform, started to swim forward hitting on me and my partner. This caused my higher breathing and finally causing freezing of my inflator. Instructor saw what happened gave me his and closed my valve, two times but it was unsuccessful (my inflator was still "erected" ) so there was decision to finish dive. During going slowly up as a first pair (second one was supposed to wait a little with their instructor) the same noobie again lost brain and went fastly up and hit us again...</p>
39	anonymous	<p>Conditions were borderline liveable, picked up during the dive, visibility deteriorated and couldn't see exit. Went back and forth, no joy. Found exit after surfacing</p>
40	anonymous	<p>Going to Elphinstone riff for a dive, while having tech equipment on, the waves were not that high but not low either. There was no current detected, plan to come back to the safari boat. While surfacing a strong surface current has been detected, all equipment has been handed over to the crew while divers were hanging on the rope. Several tried to get out of the sea while experiencing very high waves, most made it, some have been thrown down from the ladder into the water and had to do it again but first had to fin through the strong current back to the boat. By luck they did not get hit by the ladder.</p>

41	anonymous	<p>I panicked! still don't know why. was a standard dive spot, good conditions, slept well and enough, my favourite buddies have been with me ...we have been down to 20m and checked on everyone before wanting to descent more and then: click. Panic. happy me / us we all have been well trained for the situation as our rescue course was just two weeks ago. my buddies grab my hand so I could have contact with them. I closed my eyes, take several deep breath and could calm down again. we then ascended slowly with safety stop. After that situation I did several shallower dives to gain back my confidence. Slowly worked back to being 100% fine with depth as we all did not know what caused the panic. with new buddies diving new places (like in the cave course some weeks ago) i tell people about my experience and that I know the feeling coming up and that i can handle AND communicate it without getting into a risky situation for everyone. I want people to be aware of the possibility. During a liveboard holiday in Egypt of Girl of our dive group panicked as well. And I had a feeling about it before it even happened. Seeing her diving and holding her regulator in her mouth with her hand. Looking around fast all the time...I stayed closed (although she wasn't my buddy) because I knew I was the most experienced diver in this group beside the dive guide. aaaand it happened and I could help her. Touch contact. Regaining slower breath. Ascending with safety. I think I couldn't have done it that relaxed if I didn't experienced the same thing 😊☐</p>
42	anonymous	<p>During rescue training, while simulating a free-flow regulator, my regulator went into actual free-flow, causing me to perform an emergency ascent on secondary regulator. lost 160bar (from 12l) cylinder in less than 2 minutes. of we had been deeper than 10m, it could have been a lot worse.</p>
43	anonymous	<p>Zurkowanie z Łodzi na wrak 30m przy bardzo złej widoczności. Wynurzenie w toni bez boi.</p>
44	anonymous	<p>During a night dive taking photos and videos disregard compass.</p>
45	anonymous	<p>Mouthpiece on my 2nd stage detached and I couldn't see that the 2nd stage had fallen away.</p>
46	anonymous	<p>we were looking for a net and he did not know where it was, and so we were swimming fast and i was using 2x my oxygen. he was also under 30 bar by end of dive and we were close to DCS</p>
47	anonymous	<p>I was diving the Polynesia keeping on the deck at max 53m . I had done this dive many times before and it is one of my favourites. For some reason when I reached 50m I heard what I thought was a big leak from the pillar valve. I thought I was calm when I approached my buddies to alert them. They both said there was nothing wrong but I could still hear the noise. This made me panic and I emptied my tank as well as my buddies, in the 2 minutes it took to reach the 9m safety bar. By this time I had switched to my nitrox and calmed down. I stayed on the safety bar until all the group had ended their dive too. The equipment was examined by the manufacturers professionals and found to be in perfect working order.</p>
48	anonymous	<p>Was doing swim throughs at ~15m on the Port Napier, Isle of Skye, Scotland. Got a weird visual floater in my vision. Called the dive, was a bit out of it on the surface. Put on O2, taken to hospital in an ambulance where I was given an IV for hydration and had a nap. Likely the cumulative effect of 2 weeks of being very busy, with not enough sleep.</p>

49	anonymous	Lost at the wreck, nitrogen anaesthesia, out of air at boat towing at bad weather conditions
50	anonymous	First near miss already explained. Second near miss was expected because I was testing very old overhauled equipment.
51	anonymous	Air trapped in the legs of my drysuit and I wasn't prepared for how fast that can cause an out of control ascent.
52	anonymous	Bov was leaking water. Felt stressed Was concerned about co2 hit Bailed out - wrong gas (deco gas at depth - high ppo2) Gas switched to bottom bail out instead of deco gas So completed my deco in the wrong gas Nearly passed out from hypoxia on the surface But came off the loop (breathe air on surface) No further (dci or other) symptoms Cylinders were marked with gas content but not mod Because of that During my bailout and subsequent gas switch I did not checked my cylinders and ended up switching to the wrong ng gases twice.
53	anonymous	Was the first time I used a dry suit in natural conditions and at the end of the dive I surfaced up uncontrollably. I dove with people I didn't know well and I barely knew how to use my dry suit. On the top of that, it was a night dive... To many hazards led to this situation
54	anonymous	Diving with DPV along a shallow bottom with no real specific features. One diver stopped to look at an object and we separated. Reunited at an designated meeting point.
55	anonymous	I had a scary shore exit on a wave-ier day where I ended up pushed against the rocks and unable to make my way out without assistance. The factors that led to this: I was very overweighted from switching to using a steel tank for the first time (from aluminum) and not thinking/knowing to adjust my weighting accordingly. I wasn't very buoyant at the surface, so I used backgas instead of a snorkel to swim in. This meant I was basically out of gas at the exit, except I wasn't focused enough and ended up too close to the rocks along the breakwater on one side and the waves pushed me into the rocks. As a new diver, I was unable to pull myself out on the rocks, and without enough gas (or knowledge) to push myself into deeper water to do the approach again. A person on the pier/breakwater called for assistance, but my buddy was able to assist and got me out of my gear so that I could get myself standing and walk out.
56	anonymous	I had an uncontrolled ascent when diving in the sea in Scotland. My drysuit valve was stuck and I could not vent the air. It was very scary as I could have been struck by a boat. I did not dive again that day.
57	anonymous	Finished without air and had to do a quick ascent. Got lost during a dive

58	anonymous	My open water certification was in 2016. I did not get back in the water until early 2023 with no refresh course or other dives in between those two periods. Upon getting in the water, I immediately felt task loaded and uncomfortable, however, my breathing, and ability to scuba dive was technically OK. I did two dives in beautiful conditions, however, I canceled both of them within 10 minutes of the start because I was task loaded and mentally unable to comfort myself enough to dive safely. Upon returning home from this trip, and these two aborted dives, however, I will turn them successful dives, as I am still here, I immediately enrolled in a refresh and an AOW course.
59	anonymous	I switched from twin steel 100s to twin aluminum 80s and didn't perform an adequate weight check. During the dive, I realized I would have trouble during my ascent. I was able to ascend safely but I missed the exit point. The wind and waves drove me into large rocks near the exit and I got pretty beat up on my way out. A gauge got smashed and I was almost too exhausted to climb over the rocks with my tanks.
60	anonymous	My o2 regulator on ccr had a higher than normal intermediate pressure. I disregarded it and during deco time, the o2 started free flowing
61	anonymous	Strong currents off the coast of Malta, north. No indications of strong current at surface. Conditions changed drastically within 30 mins. Made it back to exit point after cancelling dive midway. Made it back with only 10 bar after having to fin very hard, while buddy was panicking.
62	anonymous	It was a dive in winter, in a quarry in Poland. we were going to fast for me, my buddy was about 2 meters before me. I was breathing too fast, panicked and ascended to the surface from about 15 meters. I couldn't find the inflator to inflate bcd. My bcd was empty, I didn't have regulator in my mouth. After some struggle and drinking some water I remembered I can inflate my drysuit. I was alone. Almost stopped diving after that.
63	anonymous	During a bailout training at my CCR training I inhaled water because my regulator was blocked by a misrouted hose
64	anonymous	I was a new diver and my local shop suggested that I get a drysuit. I didn't know there were courses to learn how to use it. I went diving with friends wearing my drysuit for the second time and nobody told me there were issues that it was way too big/long for me. While diving on a river with medium flow, I lost control of the buoyancy of my drysuit and popped to the surface with way too much air in the legs. I wasn't able to do the pirouette or dump air. I was floating upside down and my buddy never noticed that I was in a bad position. I had 500 PSI remaining and I was not able to come back in a correct position. Finally, my buddy noticed I was missing, she came back to me and flipped me on the side so I was able to remove BCD and reach the shore.
65	anonymous	Regulator freeflow on a dive in cold water below 25m. happened twice on the same dive. dive aborted with a safe controlled ascent after second free flow
66	anonymous	Freeze up of first stage on a fresh dive in ice cold water.
67	anonymous	New Sidemount setup with Aluminium tanks, which means I need a lot of weight. Wavy and strong swell. Headlamp with battery attached to dive tank. My buddies were already under water. I went into shallow water to attach my dive tanks to the bcd and to put on the fins. Before the BCD inflator hose, dry suit hose and regulators were in place, the swell pulled me out in deeper water. Due to the overweight I sank. I did not think about the weight release and tried jumping back to shallow water. Eventually it worked. Since then I have my regulator in the mouth before entering any water where a similar situation may occur and have an at least orally inflated BCD on.

68	anonymous	Sudden change of weather condition. Wind Direktion changed during dive which resulted in massive currents and visibility dropped from 40m to 0m
69	anonymous	Free flow reg 120m - blown first stage
70	anonymous	Several and different types throughout my 20 year military career. Most recent was an OOG situation when my student, unbekownst to me, followed me down to 40m instead of going to the boat as I had instructed him to do. He understood my instructions but chose to disregard them.
71	anonymous	I was diving with a group of less qualified and less experienced divers. It was day 4 of 6 in Scapa flow. I entered the space under the stern guns of the Kronprinz Wilhelm, became disoriented and struggled to find the way out. My bubbles knocked down silt from the deck, reducing the visibility. After taking some wrong turnings, I stopped and stabilised, lowering my breathing rate and letting the silt settle. As I was about to set off again (in the wrong direction), my buddy shone his torch into the space. I saw it and swam towards it, arriving back at the entrance and out to safety!
72	anonymous	LP hose on Trilam dry suit was connected but the cover cap ring (50 cent component ) had jammed under the balls of the lp hose connector . I checked inflation but didn't pull on the hose . Jumped in with a negative descent from the boat didn't notice that the hose had flipped off and was now jammed behind the ccr out of reach. lost buddy in descent poor vis . Was at 15 metres before I try to inflate dry suit , had to continue with the negative descent outer wise would have been dragged over the top of the wall on major drift dive . Got out reel and smb to abort , Found buddy , he found my inflator hose as the suit crush wouldn't allow me to reach behind. hit the wall at 30 metres with reel and smb and hose in hand , stopped sorted out my gear inflated dry suit . I still was in control of buoyancy during descent but time was the issue needed to be below 25 metres to avoid being washed over the top of the wall and into an even more hazardous area. lost buddy while trying to sort myself out. Continued the dive solo trying to find buddy pulling the pin early. Bad bruising on arms legs and back . No other medical issues
73	anonymous	On a boat trip, I went into hypercapnia as I fought against a strong current to reach the anchor line. It was very hot and I was very out of breath due to the strong swell.
74	anonymous	Buddy ran out of air due to no buddy check and we were overly confident of the dive operator that switched our tanks between dives
75	anonymous	We Dived in a Lake With a termocline after. Nightshift. I choosed the wrong Equipment and get could. Also i Lost my Buddy. Then I started paniking and returned imidatly to the surface, left muy Buddy alone.

76	anonymous	Ran gas cylinder lower than I would normally like due to unplanned time spent at depth. It affected my buoyancy more than I anticipated and I missed my safety stop (no deco)
77	anonymous	I suffered a cardiac arrest during a shallow dive without any previous symptoms or warning.
78	anonymous	I dived with a new tank and dive instructor suggested I need less weight. So I shed 2kg and had problems keeping 3m for last safety stop, consuming all air
79	anonymous	I already did ;)
80	anonymous	Various, but I'm referring to an episode in my youth when I got narced, solo on a sandy bottom at around 70m on air, then I lost my bearings and was sure I was dying. At least stupid young me decided it was time to rescue myself with direct ascent to more sensible depths. Regained confidence I wasn't going to die at around 35m. Following this I did full tech training and only dive deep with sensible gas choices.
81	anonymous	Too much weight for a suit that was too thick for the circumstances
82	anonymous	Zamrożenie automatu podczas kursu, wyciek gazu, uszkodzenie automatu, efekt martini
83	anonymous	I was diving on about 30 meters inside wreck. Many recreational divers were diving there. There was good visibility outside and warm water. Generally it was easy wreck with lot of exit points. We started swimming inside very tight and dark 'tunnel' inside this wreck. One by one. Suddenly person in front of me has disappeared and I couldn't find a way in any direction. Everywhere I felt wall. I decided to turn around. Unfortunately I am not too big. Behind me I saw my buddy, he got stuck the same way as me buy earlier. He was too big to turn around so I started pushing him and he was finding a way with his fins. We swam out of the wreck and waited there for divemaster. Everybody was ok after this accident
84	anonymous	Diving in the Baltic Sea (cold, dark, visibility approx. 10-15 m). We were supposed to dive the wreck, which lies at 42 meters, but starts at 33 meters. I was ordered to stay above the gun and cabin. During the descent at the line, I couldn't turn on the flashlight, but Buddy showed me that he had light and "we're going deeper." At 30 meters I experienced severe nitrogen narcosis - I stopped, breathed slowly and it passed. Buddy asked if I was OK, so I said OK - because I was alive (but still scared). At which Buddy turned and started to go deeper. I descended after him (without my own light), after a while the buddy turned around and asked if Ok. I replied that OK – meaning - I'm alive. At which the buddy turned around again and started to go lower. Then I decided not to go any deeper and watched him descent. I stuck to the cabin - I saw the lights of another group nearby and decided that if necessary, I would go to them for help. When he turned around, I was waving like crazy that I had had enough. Buddy swam up, checked my air (I didn't have a light to check the pressure gauge) and ordered to surface. Unfortunately, he had no buoy (me either), so we emerged in the middle of nowhere. At the surface I had 20 bar. I never went into the water with that buddy again, I bought a good flashlight and a buoy.
85	anonymous	missed navigation on a dive in poorer visibility conditions than usual (due to weather)

86	anonymous	I was diving on a dive site that i didn't know with my buddy, french federation / cmas so we didnt need any kind of guide cause autonomous divers, got lost on the dive site couldnt find the boat so dsmb surface after the deco and we swam to the boat
87	anonymous	During my aowd dive my torch broke, my back up torch broke, i lost my buddy (who was my instructor), i started panicing due to bad visibility in hancza, i waited a minute and couldnt find anyone from my group. Then I decided to stop the dive and head towards the surface. Near the syrface I could not pump my bcd - there was malfunction of the button. I was trying to get rid of balast which i finally did, trying to reach to the buoy on the surface. I saw divers on the surface and tried to scream but i couldnt keep my head above the surface. Evetually i managed to catch the buoy.
88	anonymous	1: diving in a colder area than normal requiring semi-dry suits (usually dice in warm water). Blew through air without realising and was too engrossed in sea life to check since I thought I normally don't run out of air for much longer. 2: diving with very old rental gear. Unsure about when it was even last serviced, or if it ever was as the dive shop seemed pretty sketchy. Depth gauge on my bcd stopped working at about 10 metres. Option was to stop the dive, knowing that we most likely wouldn't get a refund or just dive really close to my buddy, trying to not go below him. Dove the same or more conservative dive profile than him, but now I know just how dangerous that was.
89	anonymous	1. In horseshoe shaped bcd, Libra, air became trapped on my right side when I began to ascend in horizontal position. As I neared the surface my ascent became hard to control, I swam downward, people handed me weights (we were on a trash cleanup dive) thinking I was underweighted. Eventually a friend who is a dive pro, tried to unattach my LPI hose, thinking it was malfunctioning. As she did, she spun me in the water and the air moved becoming dumpable. This had occurred previously, but the correct cause of the problem was not identified by me or my dive buddy and I had just thought it was due to being underweighted. Since then I was always cautious to ascend head up and became reliant on pulling my LPI to dump more air from the closed shoulder valve. 2. My cotter pin came loose in my LP inflator on a dive. I realized this as the bottom, and tried to carefully dump as I ascended from 50 ft. However, as I neared the surface, 28 feet, I began to ascend uncontrollably. I was quickly at 14 feet and still unable to dump adequately. Given that it had been a shallow dive, and the surface swells were pulling me upward, I gave up my struggle and surfaced. I refused the second dive of that day and serviced my gear. I have since changed to a halcyon single tank wing (20#) and love the rush of air as I use my dumps now. It seems a much better design and function.
90	anonymous	It wasn't that close. Didn't check the gas often enough. Couldn't find the ascent line in time. Decided to ascent in the blue with minimum gas and throw the bout
91	anonymous	Panic attack loss of breath
92	anonymous	We were on a rib and I was sitting opposite my buddy who was using weight pockets. Because they were opposite me I could not check the colour of their weight pocket lock was correct and just assumed because it was in correctly that was a sufficient check. Their weight pockets then fell out on the dive and we had to work together carefully to safely ascend without sufficient weights. Luckily we had structures to hold on up to a relatively shallow depth and it was our first short dive.

93	anonymous	It was wreck diving. I was divemaster with group of 5. The previous day was great visibility >20m, but cold. This day was warm, but visibility 0. We have found the wreck, but not seeing any details (looking by touching), hardly seeing each other. I decided to finish the dive, however not everybody was happy for that. There was a pair of fresh OWDivers and I was thinking about them. We stayed close to each other, but couldn't find the way back. I decided to catch the hand of the closest diver and gave him the sign to do the same. I decided to ascent without the line holding all group together. After a few meters the visibility got better enough to see the line, so the end of dive (ascent) was safe and allowed the Group to calm down. After dive all Group agreed it was good decision. I learned to predict that visibility is not sure till you check it at the dive and give clear instructions in case it is bad. I am crazy for buddy system and diving close to my partner. Also when teaching, I put more attention to partnership during diving.
94	anonymous	I was inattentive during the dive and got my cylinder entangled in the handrail wheel
95	anonymous	Dive side mount. Has stage. Last dive of a 1 week trip, blase, accidentdentally turned main cylinder off instead of stage on. Since I had not, on this dive used the other cylinder, I had accidentally put the second regulator under my suit inflation house. Now always breathe off both regulators with 5m of starting dive.
96	anonymous	OWD course first dive for 18 m in cold quarry, emotions, rush, wet suit and my reductor froze
97	anonymous	my partner panicked under the water and i need to help him, rescue from 20m
98	anonymous	Went into an engine room in a wreck and was engulfed in a big silt out
99	anonymous	The first situation is strong nitrogen narcosis, resulting in severe laryngospasm (feeling of no air in the tank). Depth 32 m, second minute of dive, gas - air, location - south of Egypt. Stress tolerance saved me - without panic I did all the procedures, ascended 4 metres and the narcosis was over. The second situation is a 36 metre dive, about 50 minutes, gas - approximately EAN 65%, quarry with a water temperature of 4 degrees Celsius. I was sure that there was air in the cylinders and did not check before diving (cut the corner).
100	anonymous	On a liveaboard in Palau. The drift dive was led by the DM with a good briefing. However , the current was a different direction than expected. Two divers from the first group surfaced at the beginning and then joined our group, unknown to the boat captain. When we ended the dive and surfaced, the boat was far away. They were searching for the 2 "lost divers" who were with our group. The current was taking us to open ocean and the swells increasing in size. We stayed together, and one person lit up SMB. The swells got larger and we could not be seen. All of us put us SMB (plastic sausage at that time). The boat finally saw us after 45 minutes and we were about a mile away. None of us knew we were in trouble. None of us had an air horn. Three days later, 3 divers were caught in the same current and died when they were not found soon enough. I bought an air horn after that. I also have a Nautilus now. 1994.
101	anonymous	Pannic atak. I had 3 stresors: i cauldnt go down, I had water on my maska and I couldnt solve tej problem, my doughter has waited for me underwater and I have tought that she Has been lousing het air. When I fot the bottom I felg big, big fear. Suddenly I jump up to rescue me. On the sea I started sweem anywhere, just far away from the place I dived. Staff on the boat started to screamo on me. The have me safety wheal. I caught IT.

102	anonymous	Dive was in Malta, was also with a large group (10 people) Planned to be a long dive, as we had to dive under a long narrow passageway with boat traffic above us to get to the main site. Dive on main site proceeded ok, had some mask issues which used more air to clear. Was conscious/concerned that gas was lower than needed so did ascend ahead of the rest of the group. Finding/informing the dive guide was difficult as the group had split into pairs and diverged. Made it approx half way back the passageway before my out of gas. Tank also became positively bouyant when gas level was low which added workload Ended up surfacing in the passageway where the boats were overhead.
103	anonymous	Break of first stadio (regulator)
104	anonymous	I was underweight. I had no diving experience and was unaware that I would get "lighter and lighter" as I used up the air from my diving tank. During a safety stop at a depth of 5 meters, I was uncontrollably pushed to the surface.
105	anonymous	First one was stupid navigation one in cave - there was ongoing works in the cave to put new line in new tunel and we end up entering this new route, second was stupid mistake with procedures with ccr
106	anonymous	Wich one? Didn't connect the hose to the bcd. Found out on descent on a moore line, used dry suit, inflated orally and then asked my vuddy to reconnct it. Stage hose loose, bubbles on turning on the valve, retightened the gose, dove on. Closed manifold: got out with about 2bR left, found the mistake after the dive.
107	anonymous	Ran out of air on a charter dive, dive master provided his secondary
108	anonymous	Tank quck lost oxygen ,
109	anonymous	I didn't check the brand new BCD properly, it was incomplete { no fastening strap for the inflator which had become detached}, I didn't check my partner's buddy, and additionally the weight belt was blocked by the Velcro strap. My mistakes resulted in the inability to surface. The diving partner is the wife { owd } . terrible experience.
110	anonymous	No
111	anonymous	Me and my buddy was taught to open the valve and turn it a half turn back. She confused the directions and closed the valve and opened it a half turn. It worked fine for a while until the tank lost a little bit of pressure, but it worked out fine. I'm now an instructor and teach everyone to open the valve all the way telling that story.
112	anonymous	The knob of the valve was not working properly. It was moving giving the sensation that the cylinder was open but it wasn't. It was single tank on the recreational dive and when I went to more or less 6 m I couldn't breathe. I asked my buddy for the gas and showed him to check the valve. He opened it and we could continue.
113	anonymous	Zero visibility. I did not see my buddy very well do u was too nervous
114	anonymous	Po wynurzeniu burza piaskowa na morzu, statek niewidoczny, tonące ponntony
115	anonymous	I have drysuit first time without skills. I lost a fin and first time i have a panic attack. My buddy was not prepared for this situation and he did not help me. It was a really hard situation. But I still alive , i passed a dry suit course . Sometimes I am thinking about this situation. Now i know... knowledge first.

116	anonymous	The dive had ended and we were ascending from 16 mtr along the anchorline. I was in a dry suit and on the ascent lost control of buoyancy at around 10 mtr, unable to purge the air in my dry suit quick enough. My analysis is that I wasn't allowing enough time at the deeper levels to purge air from my dry suit, and once buoyancy was lost, it was not possible to get it back quickly
117	anonymous	During the course, on my first dive in open water, I had an uncontrolled ascent from a depth of 5 m. I inhaled too much air into my BCD and lungs. When I realized that I couldn't fully control it, I did what they taught me during the course. I exhaled all the air from my lungs and tried with BCD. The depth was so small and it happened so slowly (my dive computer did not report exceeding the allowed ascent time) that the assistant instructor thought I was scared and made a controlled ascent. Only after I explained what it looked like from my side and checked my computer, the instructor's assistant asked if I wanted to continue diving. The situation may seem trivial, but they taught me that a moment of inattention can result in being shot to the surface. Since then, I have been taking great care of my buoyancy
118	anonymous	Missed the exit point due to debris field.
119	anonymous	Whilst on a freshwater CCR deep dive after 15 mins into the dive @ maximum depth 65m I realized breathing rate going up rapidly - the imminent signs of a scrubber failure and giving very short time to react before being unable to react - I switched to open circuit on the bailout valve, deployed bailout regulator and switched to it .... I gave emergency signal to my buddy and started ascend well knowing that the bailout gas will not last very long as a CO2 hit causes a very high RMV of about 50-60l/min/surface .... it took finally about 6mins to get the breathing rate down to normal - gas level went from 180 bar to 20 bar in a 80cft so I decided to miss the first 2 stops @ 24m and 21m and did the first stop @ 18m including gas switch to the deco Gas. Deco was uneventful and I extended the last 2 stops by doubling them with a back to normal RMV. Once out of the water and disassembling, I realized how poorly I had packed the scrubber in a morning rush - Key learning: Never pack scrubbers in a rush, do prebreathing, practice emergency skills
120	anonymous	1. Swam hard on my new ccr and over breathed it. Had to bail for a few minutes to get my shit in a sock, got back on the loop and exited. I had worked much harder on previous dives without issue, I just concluded your pain threshold for co2 retention varies a good bit day to day. At start of dive I got some water in my ccr. I performed a dewatering routine and monitored the cells for a few minutes and concluded all was well but remained vigilant. Continued the dive. About 30 minutes later I felt the dreaded spricy water hit my tongue and bailed out lightening fast because of my previous vigilance. Later when I took the ccr apart it is massively apparent the 2-3 oz of fluid in the unit was VERY caustic. Exit was an uneventful swim on OC bailout. I chose to continue the dive initially because it is an accepted norm that ccr's have some small amount of water in them post dive (approximately 2-3 oz) I was taught ccr's can go caustic if water gets in them however it takes an unknown amount of time to do so and an unknown amount of co2 to start the reaction for a given amount of water. I did more research on it after the fact and didn't get consistent answers on what is actually acceptable. I'm still not sure what my pain threshold on water in a ccr is. 3. I was diving tight and grindy stuff and I broke my o2 reg on my ccr. This caused the o2 to leak. I feathered it as long as I could but during tight passages I chose to let it leak while I squeezed through. I'd rather waste some than go hypoxic in a tight squeeze. See no reason to blame the gear, it wasn't particularly weak i just asked too much of it and got unlucky. Eventually the o2 ran out and I was only half way out 2000' to go still. The subsequent scr bailout did lead to way more deco than I anticipated because I dive lean dil intentionally to make it easier to extinguish high po2 conditions caused by dissents. I still believe in using dil that never exceeds a dil po2 of 1.1 (for your intended max depth) however I am sure to keep a richer bailout tank close behind me in the cave that is equipped with a qc6 so I can offboard it into the ccr incase I do end up in an SCR scenario. That richer dil makes SCR much more efficient. Never had any near misses diving OC. All of my closed circuit drama occurred in the first 100 hours of learning ccr. Yes I think ccr is inherently more dangerous however I don't think it is unsafe overall to use them.

121	anonymous	Already explained, but will add that I took the TDI training to get trained on proper deco procedures
122	anonymous	During CCR diving I was affected by CO2 intoxication. I felt and stopped all activities managing to signal situation my buddy. My buddy was so far and not looking at me, so I had to separate and manage situation on myself, surfacing alone
123	anonymous	I had my first near miss situation when I was taking my open water diving course, and it happened during my first open water dive into the depth of 18m, when i first descend, I was panic and forgot to control my BCD, and it caused me to sink onto a big area of sharp corals, having me got cut over my skin (was wearing a short sleeve wetsuits). I struggled to move away from the corals and ended up with more cuts and injured deeply. After that I felt the need to learn to control my buoyancy better. So I continued to go for advanced open water diving course and so on. My second near miss was during my first week of divemaster training and I had difficulties managing myself in a strong current (my other leisure dives before this had not encounter any strong currents), and I lost buddies with my group.
124	anonymous	I nearly missed that underwater orgy. That would be really awful and ever since I am always on time for my dives.
125	anonymous	I had clipped my camera gear to my chest and when someone kicked my reg out on a dive I panicked when my secondary was tangled in my camera and shot to the surface from 50 ft.
126	anonymous	1. Panicked because I was swimming to fast in really low visibility and then destroyed car appeared 20 cm before my face. 2. My gas ran out after long dive, it was done to check how it's feels like to have no air in the tank, it was under controlled condition with my diving partner and he has stock of gas and we have few minutes to end a dive 3. I was with my partner on 28m on the lake Hańcza and then my apparatus freezes, gas started leaking fast. I informed my dive buddy about my failure and he just fix the apparatus by screwing it on.
127	anonymous	blocked inflator from bcd
128	anonymous	we dived at manta point, when we surfaced, the entire group was carried away by the current down to 30 m, which later changed into a current towards the surface. Whirlpool - we couldnt do anything. But hold together and breathe :)
129	anonymous	Perdí el lastre de un jacket rentado, el bolsillo de lastre se abrió y me cayeron dos plomos, tuve suerte de agarrarme con el cabo e hice un ascenso controlado mientras mi compañero buscaba el lastre
130	anonymous	I was a new OWD on my first non-instructor boat dive. My dive buddy was a little more experienced but not much. He forgot to put his weight pockets in his BCD and we did not do a buddy check. During the dive he struggled to stay down. Rather than aborting, he picked up a buoy weight and continued the dive. He used a lot more air because he was struggling. Eventually he indicated we need to turn the dive and go back to the anchor line. Because he was so low on air, he went towards the anchor line angling up, while I continued on the bottom looking for the line. When I got to the line I realized my buddy was gone. Instead of doing a 360 for one minute and then surfacing, I kept looking for him. There was an instructor teaching a solo student 10 feet above me on the line, so I felt safe even though I was already at 500 psi. Eventually, I realized I was going to run out of air if I stayed, so I ascended. When I got to the safety stop, I saw my buddy on the no swim line going towards the boat and he saw me. I was at 100 psi, so I skipped the safety stop, ascended and got on the boat with less than 80 psi. My buddy had even less air than me.

131	anonymous	Rental SPG not showing correct pressure/needle got stuck towards the end of the dive. Was a new diver that time
132	anonymous	Frozen regulator on deco
133	anonymous	Block add valve in dry suit at 30m. Cant add air to dry suit
134	anonymous	<p>*Please do not share on social media as some persons involved made mistakes and might not want communicate about it, thank you* Context: diving with friends in Scapa Flow (wreck diving), we rented 2 boats and were 20 divers to know each other. I was in the first boat to dive, people in the second boat would dive 20 min after the start of our dive. I am a CCR diver. While getting prepared do dive a wreck at 40m depth, my usual buddy (and partner in life) got an issue with his machine and could not dive. I felt confident I could dive alone around (not inside) the wreck. My buddy heavily insisted I dive with someone. He was concerned I could have issues not finding the boot to exit, then do not manage my SMB, then do not manage my spare SMB, and if all this would happen I would not meet one of the other 19 divers at the end of the dive. I felt this was exaggerated, but I accepted to dive with 2 other persons so that he would not worry. The 2 other divers were open circuit divers, which I thought would shorten my dive as I was in CCR configuration. One was instructor diving since over 40 years, and the other was his trainee doing intro to tec course. The instructor was having health issues (night insomnia). Although they were friends, I never dived with them before. Their plan was to dive inside the wreck and then outside. I agreed to dive inside the wreck with them as I would not be confident to do it alone, then leave them once we are not inside the wreck anymore so that I can dive longer. When we entered the wreck, I observed that the trainee finning was moving some silt. The viz was about 2-3 meters or less (before any silt agitation). The instructor proposed to go further into the wreck and pass a door. I accepted, but then I changed my mind and did not follow them without having the possibility to inform them. The reason is that I felt this would be dangerous: no line was put to find the exit, silt movement, if they would get lost they would panic (trainee, unhealthy instructor) and have limited time due to OC configuration (and maybe attack me while being in panic). Also, I did not go deep in the wreck, only 5 meters to my judgement, so I thought I could just turn around and exit. But after I turned around, the roof was getting closer and closer to the ground, until both joined. I thought that maybe the entrance door is a little bit on the right or on the left, so I tried both directions along the wall, but it did not work. As the roof was touching the floor, the silt went up and the viz felt to 10 cm. I decided to stop, hear my breath to slow it, and then think. I calculated (wrongly actually it would be more) to have 2 hours breathing with my CCR. Nobody would worry about me before at least an hour since we agreed that I leave my buddies after exiting the wreck (if they would find the exit themselves). And even after an hour, given the viz had fallen to 10 cm, it would take time to find me back. So I could not just stay and wait for a rescue. I decided to come back to my initial point. As the roof went up, I saw some blue light, then found the exit. The 2 other buddies saw me exiting from far, but I did not see them. So I waited for them outside the wreck for 20 minutes, then alerted while being underwater other divers (including one cave diving instructor) that they were lost inside the wreck. Other divers started the search and luckily found my 2 buddies outside the wreck after 5 min. I did not share the full story immediately after, because it would have criticized my 2 buddies, I was afraid this would have affected the mood of the 2 boats. In hindsight I should have shared with my 2 buddies. I took some decisions and learnings after this event: do not dive tec with people you do not know, do not go beyond your qualifications unless it is during a course with a known instructor for a specific training, took a full cave training, when in group we underestimate danger, read Under Pressure from G. Lock.</p>
135	anonymous	Never had a fear of heights on the surface, got a panic attack when I was supposed to go down over an underwater cliff.

136	anonymous	Initially we used to hang the deco tanks rather than carry these with us throughout the dive. Once the boat captain or his assistant tried to improve what he felt were tangled ropes and in doing so unclipped and dropped to the bottom our deco tank. On returning to around 15 metres following the shot rope, my buddy and I could not see/find the deco tanks.
137	anonymous	I was swept away in a current and lost the group in open ocean dive north of Pemba island in east africa. The team was ignorant of the risk and my concerns were dismissed (I was diving with my supervisor, he did not acknowledge my concerns). There was no dive plan or emergency plan. My research required me to dive around the group, my supervisor was not listening to my concerns of not having a buddy next to me. After that I always made sure to evaluate dive plans for safety and to make sure to carry my own redundancy for signalling the boat (i did not carry any SMB/tracker or anything), was not aware of the emergency plan for this situation. I also learned that I can respond well in very stressful situations. I stayed calm and by sheer luck found my team back by clinging to a rock for half a minute and looking around (very good visibility). If I had not found them back it would have been unlikely the boat would have spotted me in time and with no rescue services available in this part of Africa that would have led to very slim chances of me being found in open Indian ocean. Now I make sure to not dive in a team that does not follow the same procedures for dive planning, including an emergency plan.
138	anonymous	I had gotten my licence 2 almost 3 years before and I did not do a refresher dive before or brush up on the material needed beforehand. It was a shallow dive and so nothing bad happened, just when we got to a shallower bit i felt floaty and before i knew it i was at the surface. My BCD was too inflated and i did not have the correct weight for the thickness of the wetsuit. Struggling to sink at the beginning of the dive should have been my first indication if i had prepared myself beforehand.
139	anonymous	Recreational dive in our local waters around some bridge pylons. Currents can be very strong, so we only dive there when the tide turns. We got caught on an outside slope of a pylon at about 20m depth where the current kept pushing us down to deeper waters, making it hard to go shallower and closer to shore. I was on D12, but my buddy was only on a single 15L, so we had to make a free ascent while he still had enough gas. We could swim some of the way towards shore while on safety stop in free water, but got separated and eventually did the last part on the surface. Not idea in a place with shipping traffic, but I used my SMB and did everything by the book. Other than maybe improving navigation skills, I'd say we did exactly what we were supposed to do given the situation.
140	anonymous	Coming up from 30meters, large group, one of my students lost control and went up from aprx. 15meters. I was too far to assist.
141	anonymous	Become hypercapnic around 200m of penetration into the mine. Bailedout and returned to entrance, repacked the scrubber with fresh softlime and dove again without issues. Root case was channelling in the scrubbers.
142	anonymous	Not applicable. Best regards, Raoul Claessen Vlasbree 66 6065BZ Montfort, The Netherlands Raoul.claessen@gmail.com 00316 13718042

143	anonymous	Did not check if second tank was open when starting sidemount dive.
144	anonymous	First stage has burst and free flow started, had to close the cylinder valve and switched to buddy breathing... In plain words - when the shit goes down you better be ready
145	anonymous	Rapid ascend
146	anonymous	Decompression tank gauge explosion underwater and quick deco gas loss. Most tec trainings include such drills but in reality it is quite immediate and unexpected and noisy scenario. You have to act very very quickly and be trained for this and other similar situation. This is why we practice drills on every dive and also do separate diving trainings sessions.
147	anonymous	During the Deep Diver course, I practiced running out of gas, but I mixed up the valves while under the influence of nitrogen narcosis and turned off the valve of my regulator in the twinset configuration. This resulted in limited gas flow at a depth of approximately 30 m, loss of consciousness and the need for the instructor to undertake a rescue operation.
148	anonymous	I was preparing to get back onto the dive boat in somewhat choppy seas. I held the line too close to the boat. I looked down to unbuckle my fins, and when I looked up, the boat was above me, raised by a wave, and falling towards me. I managed to push myself away, but I did get grazed by the ladder. My ears were ringing for several days. If I looked up a second later, the ladder would hit me right on the center of my head and likely knock me out.
149	anonymous	Run out of gas with instructor
150	anonymous	1. BCD failure on 30m that stuck pumping air. Muscle memory forced the airway to clear, making a sound, and hands struggled to unhook the hose from the inflator. I stopped at 3 meters, and if it weren't for the training (I often practice at the end of a dive), it probably would have been over. 2. Out of air at the end of the dive - stretching the dive just a bit to long. 10y ago so I remember my lesson learned. And couple more.
151	anonymous	As I wrote above: 1. Launching to the surface from about 7m trough an inflator blockage. Nothing happened to me I automatically let the air out of my lungs. 2. Twice I got lost underwater once due to conditions, the water was very murky and at 17 meters it got completely dark and I didnt have a torch. I remained calm as I always do and found my dive master when he turned on his own torch, I was on 5 at the countdown to 30 before emergency ascent, so quite fast. The 2nd time I lost the group was on my first dive in the Red Sea, but the visibility was great and I quickly found the group, I got lost bc I swam behind a green turtle insted of my dive partner Xd My fault. 3. Constany probkems with my right ear. I have a clenched eustachian tube making it difficult or impossible some times to regulate the pressure in my right ear. Now I have some drops and I always going down really slow, but eardrum perforates anyway. My partners know about it and they are waiting form me. So basiclly only the first incident was really near miss, but I know that uderwater all of them can be tricky. Im always prepared for this kind of situation
152	anonymous	The fin lock slipped out of its mounting. The fin falls off the leg. It was impossible to surface due to the strong current and surrounding rocks.

153	anonymous	Temat jakich od groma, gówniane owd, zero umiejętności po kursie, wywaliło mnie z ~16 m..
154	anonymous	Valve partially closed. Became a problem at depth
155	anonymous	My very First Night Dive as a Kid, 10 years old, around 10 dives. Instructor, 1 other Teenager and me. Dived a sunken forest around 5m deep, trees around 20-30cm in diameter and 1-3 meters apart. While navigating through the trees, i turned into another direction than the other divers, looked back and couldn't immediately Spot their lights again - swam into them maybe 10 seconds later, but felt like an eternity. Didn't panic, dive Spot was known from the dive before, lost group Procedure was clear, felt confident in my ability to end the dive and meet them at the Surface again.
156	anonymous	First in a while dive in saltwater, too little lead,
157	anonymous	Ian have learnt that I have to be rested and hydrated before dive.
158	anonymous	I losy my ballast at a depth od almost 50 metres. My diving partner kept me underwater up to 20 metres .
159	anonymous	Regulator free flow at depth from alternative second stage on twin 12 cylinder Tec config. During my shutdown drill (left and centre post) my buddy shut down right pillar also; resulting in out of air at about 35m. As result, pushed (punched!) buddy away and re-established gas supply from right post and then re-established stable gas supply to alternate. Aborted dive due to high gas loss but not without complying with deco obligation (switched to stage when above MOD).
160	anonymous	Uszkodzenie wentyla w zaworze dodatkowym jacketu co powodowało powolne samoczynne dodawanie powietrza do jacketu i wyrzucanie nurka na powierzchnię
161	anonymous	Op valve spring broken on counter lung on my ccr. Six hours of deco under difficult breathing situation. Really did not what was the problem until I dismantled the counter lung that night. Difficult situation as deco was hanging on a smd 40 miles offshore in north atlantic. I was exhausted trying to breath with a collapsed counter lung. I could not give up or else....
162	anonymous	There is a disconnect between recreational training and real world situations. Doesn't have to be Navy "Seal" dive training; but, training needs to be enough to convey that simple problems WILL occur. It is how we think through them; that, prevents cascade failures and fatalities. Safe bubbles; hope this can help your studies!
163	anonymous	I was caught in a current in a cave. The group started to spread too quickly, I wasn't sure what we were doing there. The current was very strong and I didn't really control how close the ceiling I was. My dive instructor helped me to go out, i don't how I would do it without him. We didn't go to the surface though. We were supposed to do another dive in that spot but I refused. We went to another spot - the current was also strong, we approached another cave and I got a panick attack, my diving buddy took me to the surface (we were not deep, 7 meters maybe). He and another diver helped me to calm down and we continue the dive but we still made it shorter.
164	anonymous	Went down in poor Vis on a line, but the current was strong and ended up drifting far from boat. Had to wait on a small rocky outcrop for the boat in harsh waves as one of the divers was unable to swim the distance to the boat.
165	anonymous	During ascent we surfaced in strong current out of sight of the dive boa, spend 20 minutes drifting before skipper realized and gone looking for us

166	anonymous	Sorry, no.
167	anonymous	High poe2 in a tight space
168	anonymous	the air in the cylinder was contaminated (portable combustion compressor)
169	anonymous	I forgot to take my ballast with me on one dive in Egypt. I was 7 days on trip in Egypt. Only one time happened that i did not check my equipment with care and as a cosenquence was that i forget about my ballast. At the end of diving i was emerging a little uncontrollably.
170	anonymous	It was the first dive after a long storm and it was just the two of us in a place normally crowded. The wreck we went on had broken into two and moved 17m during the storm, so a familiar dive had become a completely new experience. My buddy (and instructor) was on closed circuit while I was on open circuit. I got lost looking at the new landscape, amazing fish and new experience of the wreck so did not track my air vs depth well. I needed decompression but ran out of air before completing the deco. Visibility in the last bit of the dive (enclosed creek) was low so I got lost from my instructor. Luckily my instructor came up and gave me his pony tank just as my air finished so I went back down and completed the necessary deco together with an additional safety stop for contingency. Still one of the most amazing dives I ever did.
171	anonymous	Gas addition button on my drysuit got stuck at 25m and I couldn't disconnect it or get the air out fast enough. Did the parachute position to slow my ascent while exhaling the entire time.
172	anonymous	Rapid ascent during dry suit training
173	anonymous	I was paired up with a diver who claimed to have lots of experience. Once we swam on the surface to the middle of the quarry we started the descent. After a few minutes I couldnt see him, stopped at 5m, came back to the surface. He was not there. Turned out he went to 35 m alone (super poor vis), than came up with no stops. He convinced me to descend again together. Once at the bottom he had cramps in his legs, than started running out of air and finally lost buoancy on the adwent (I tried keeping him down). I was sure someone will end with DCS, luckily we didnt. I was sure he was dead when we didn't meet at the surface and I think I was in shock and that's why I agreed to descend again (he told me he was a divemaster with hundreds of dives and not to worry). I had no rescue training and had to help him with cramps, runnig low on air and buoancy issues. I will never again believe it when someone tells me „don't worry I know what I'm doing. That's the first red flag!
174	anonymous	Aqualung regulator ACD failed and closed (locking air supply) at 30fsw due to improper torquing during annual service.

175	anonymous	<p>Nurkowanie w kopalni kobanya "Musiałem" nurkować w zespole z fuck upowym człowiekiem chciał zamykać grupę , na co się nie zgodziłem. Już podczas śniadania była dyskusja że zapomnieli rock bootsów i że ogarnia je z Molnar. Po pierwszych 3 minutach zauważyłem że dziwnie układają mu się płetwy (byłem osoba zamykającą) grupę. Jak można się domyśleć, płetwy musiały spać , ponieważ nie miał rock bootsów. w 12 minucie na wypłyceciu spadły mu dwie płetwy które złapałem, Drugi kolega pomógł w ich zakładaniu . Do guida pokazałem znak zawracamy. Niestety przewodnik uznał że popłyniemy dalej ... aby nie psuć nurkowania. Dzban , bo nie można inaczej nazwać "partnera" uznał że w wąskim korytarzu , złapie parę kamieni i wypcha płetwy, niestety znów stracił dwie płetwy i podniósł masę osadu doprowadzając do prawie zerowej widoczności, w ostatnim momencie gdy coś jeszcze było widać , złapałem jego drugą płetwę która leżała w korytarzu. Przewodnik wyprowadził "kolegę" i ponownie ubrał płetwy. Udało się wyjść. Po wszystkim powiedziałem parę "ciepłych" zdań. I że to nasze pierwsze i ostatnie nurkowanie razem, bo w najlepszym wypadku zabije siebie, a w najgorszym , kogoś. Niestety , do "kolegi" to nie trafiło, ponieważ na drugie nurkowanie mógł dostać buty od osoby która zrezygnowała . Odpowiedź brzmiała "On się na mnie zdenerwował" "Kolega" nie wyciągnął wniosku że jest niebezpieczny dla innych, Gdyby zdecydował się nurkować. Ja bym zrezygnował z nurkowania.</p>
176	anonymous	<p>We were supposed to back roll all at the same time. 3 2 1 here we go... When I came back to the surface, someone backrolled on me, hitting me hard with the tank on the head. I wasn't bleeding but I lost consciousness for a while and went down. Luckily, my buddy followed me, that's probably what saved my life</p>
177	anonymous	<p>We were 3 divers in Cuba, a friend, myself and the DM. We were to go on a small shipwreck along with a second group of 2 divers. We descended first and were supposed to wait for the second group. DM decided to head for the wreck but went in the wrong direction. At some point we heard sound signal but DM refused to go back. After 35 minutes DM ran out of air and we had to surface but the current took us very far from the boat around 2.5km. As there was 1.5m waves and strong winds, they could not see us. DM deployed is surface marker but it was already broken and there was a knot in it to keep the air making the marker 40cm long... My marker was on the boat... I had a small whistle but with the wind it was useless. After 2 hours, the boat finally found us, exhausted and cold. I now dive with all my complete gear and accessories even on trips. I also do not hesitate to ask more questions to all the staff to have a better understanding of the dive plan and location. When diving here in Canada, my dive plan are always more precise and I also ask questions on the dive to my buddies to make sure they also understand the dive to come, especially since waters in Canada are not as forgiving as those in Cuba.</p>
178	anonymous	<p>See previous entry</p>
179	anonymous	<p>I was inside a wreck in zero vis and thought I was in a known space but was actually in a different space that was like a maze. We didn't have a guide line and were lost for a little while before getting out through a different exit than we came in.</p>
180	anonymous	<p>I descended down a shot line to 35m with a buddy. We were trying to find a wreck but the shot had missed and we were on the sea bed. The vis was only a few metres and the sea bed was silty sand. The water was green and it was difficult for my eyes to focus. I started to see stars. In the past, I is fainted and a precursor to fainting was seeing stars so I quickly started to get worried. I went to my buddy who was on a CCR doing his checks. I told him I wasn't ok. As soon as I had something to focus my eyes on (my buddy), the symptoms subsided. We ascended uneventfully.</p>
181	anonymous	<p>Stuck inflator adding button adding air very fast to the bcd.</p>

182	anonymous	1) Croatia. Me (DM) + 2 AOWD + local guide. During previous days we make with this guy deco dives (me in SM, him single+stage). This spoil DM, this day he has forgotten that he has had 2 AOWD and go with them on 40 meters and let them get deco. What's more, he was dive as first and did not see that they are scared about computers and gauges. One of them was very big consumption (probably because of stress) and when I asked him about air he had 60 bar (15l), on his computer was 10 min deco. We started ascend in group of 3. Guide recognized about our missing 5 minutes after and met us on deco stop. 2) During diving on well known lake I bring only on SM tank, my task was to make photos on platform on 5m. I nailed, hose was not set properly and weight of tank bland it. I felt that regulator did not give enough air, first (wrong) idea was that valve was closed, so I turn it in direction that was possible (I close it). Of course it did not help. I pulled out octopus of nearest diver. Problem was solved under water. This dive taught me: mil flex hose can be blend even under pressure, always have to air line and do not dive with one SM tank (monkey style), even on 5m you can have OOA
183	anonymous	Uncontrolled ascents at the end of the dive. Determine after a few dives that the wing a buddy sold me was improper equipment for diving with a single tank. Switch to a proper wing seemed to alleviate the problem. Power inflator sticking taught me to have a spare inflator on hand to change out if current one is faulty and a service kit (orings and tools at home )to fix the faulty one when I have time which will become my spare. Apply better rinsing techniques same for dry suit inflator
184	anonymous	I went with group of people deeper than I could, my octopus froze and I ascent rapidly with someone else.
185	anonymous	Deco dive on Spiegel Grove. CCR computer failed. Did extended deco to assure all calculations were clear. Notified boat of extra deco obligations via another diver going up the line. Cleared deco slate.and had ccr unit serviced.
186	anonymous	1. My buddy hai a first stage clog because of corrosion. Didn't inspect it for more than 3 years. 2. I ran out of air because I closed all the way my tap and opened it a quarter turn instead of the opposite.
187	anonymous	Poor visibilty. It was enough not to look at my buddy for several seconds and I did not know where he was. Got anxious and lost the rope. Had to assent after a few minutes.
188	anonymous	Nurkowaliśmy w 3 osoby. Jedna z osób na start powiedziała, że jak będzie się odłączać, jak będzie się kończyć gaz. Płynęła 2-3 m wyżej niż 2 inne osoby. W pewnym momencie jej nie widziałem. Uznałem, że się odłączyła i kontynuowałem nurkowanie. Po powrocie na brzeg, okazało się, że jej nie ma. Powiadomiliśmy centrum nurkowe i rozpoczęły się poszukiwania. Zawołano służby. Na szczęście nurek znalazł się sam. Okazało się, że rozłączenie teamu było przypadkowe a nie celowe. Zgubiony nurek postanowił wrócić na brzeg, ale pomylił kierunek i popłynął w kierunku innego brzegu. Od tej pory nigdy nie zgadzam się na rozłączanie zespołu oraz po zgubieniu nurka, wynurzamy się po 1 minucie.
189	anonymous	Anna

190	anonymous	Nell'anno 2005 , full day isola di Ustica. Dopo la doppia immersione a distanza di 15 minuti l'una dall'altra e con profondità nei limiti di sicurezza secondo gli standard previsti, saliti in superficie tutto insieme! La donna si è accasciata e ha avuto un attacco cardiaco. Tempestivamente abbiamo fatto la sequenza BLSD e portata in camera , e' morta poco dopo . Abbiamo appurato che aveva il FOP e non lo sapeva!
191	anonymous	I was diving in low visibility waters and thought I could do an open descent by swimming towards the reef instead of following the anchor line. I did not get my bearings right and ended up swimming out into the open channel instead.
192	anonymous	Diving off Gili T in Indonesia, Lombok strait can be famous for strong currents, but thats more Nusa Penida/Lembongan I thought. Rounded a corner on the wall on the furthest point of the island chain and just *bam* from 24/25-ish down to 55 in a what felt like a few seconds, ears screaming. Clung onto the coral rubble at that depth, tore my hands up but there was no way I was going to go any deeper, and managed to climb back round the corner out of the down current and back up to 24/25 with the group. Gave me some more respect for currents in general. Fresh out my AOW too, humbling.
193	anonymous	Shoulder strap of rented BCD came away from the body, due to un-noticed wear of the strap and anchor stitching. I felt the strap fall loose, and successfully made a safe ascent after alerting my buddy and the dive guide.
194	anonymous	I was at 13m, my mav fired on my xccr, there was a kink in the mushroom valved and this failed open sending me to the surface as I couldn't not stop and correct quick enough. I assended at 35mps.
195	anonymous	Flodded one of the cylinders during the sidemount dive and had problem with bouyabcy due to increased weight. Dropped weights and called the dive.
196	anonymous	Cam, Mike(me), and Brian search for six gill at Sunrise Resort in Hoodspert, WA USA August 30 2023 0831-0857 hrs. Well known shore dive for experienced 3 man team, but never this deep before. Plan was to go no deeper than 130ft (our rec limits), azimuth out and -90 degree left turn return to shore was set and briefed. Cam led out as planned, I was to lead back, Brian would follow. At 130ft Cam gives signal "something wrong" points to head. I take lead and turn the dive, -90 back towards shore but we all continue to descend. The plan was to contour the bottom back to slowly ascend and continue the six gill search. We were in uncharted territory with a valley between us and the shore. Resulting in our descent upon return instead of the predicted ascent. At 150 I realized our mistake and began to ascend away from sight of the bottom while maintaining azimuth toward shore. I forgot how to adjust the exhaust valve and narcosis hit us all real hard. We were all narced out of our minds. I was ascending too fast so Cam grabbed my legs and pulled me back down. We bounced off the bottom, Cam opened my drysuit exhaust, I signalled I understood now and began our ascent again, controlled this time. We lost Brian, on the way up so we're searching for Brian. Cam and I surfaced did a quick Buddy check/neuro assessment but Brian stopped his ascent because he went into deco so he made all his deco stops. We were waiting about 15 minutes, quite worried about Brian. We all met on the surface and swam in together. That ended our weekend of diving and began our weekend of debriefing that dive over and over to try and learn how to prevent similar situations. Cam and I are getting deco and trimix with NAUI Tech. Brian said he would not return to those depths. First and only time I've ever felt narcosis and that was dive number 519. Even during advanced and master diver courses and many dives deeper than 100ft. carbonavenger96@yahoo.com
197	anonymous	Light failure in cave system coupled with free flow.
198	anonymous	See earlier
199	anonymous	lost during night dive, current

200	anonymous	I connected the hose of the drysuit incorrectly, and it started to squeeze me while diving
201	anonymous	Lost inside the wreck
202	anonymous	My mouthpiece was too big for my mouth and it came out unexpectedly. I swallowed some water which might have gone into my lungs.
203	anonymous	breathing from a flooded regulator
204	anonymous	Went for a fundive with a buddy to practice navigation. Simply got lost in a shallow bay, ended up in a marina. Carefully surfaced together, reorient ourselves and swam back to exit point which was close by.
205	anonymous	Not much to elaborate, life changing experience of self control through a rough lesson of modesty.
206	anonymous	I was night diving soon after my dry suit course, and I was using rental computer and flash light. I was not sure how deep we are (I was looking for max depth, thinking this is current) and didn't pay attention to air in dry suit. So when we swam from 12m to 6m after struggling with my buoyancy I was unable to stay under water, and went to the surface without any control. But I remembered about exhaling air. After that I bought my own computer and flashing light, and I'm very focused on my buoyancy
207	anonymous	I have lost my buddy during dive and I didn't know what to do. I saw another groups of divers and I joined them for the rest of my dive, instead of staying 1 min at same place and then ascending towards boat
208	anonymous	I was out of the air during the diving course due to the broken manometer, rented from the diving center
209	anonymous	there are many examples. But the most worrying were because of failing to do a pre dive check, a buddy check and in water check. Most because of time pressure, and impatience. So diving without checking before the air, and thinking i had enough. Material failure of the regulator because not serviced, and not checking before the dive.
210	anonymous	Blown oring and mid way point of dive at 3ATA
211	anonymous	I have had a few near misses where people with a lot more dives/experience wanted to really push the limits. I have made the decision a few times to say NOPE, leave me out of that. Refused to keep going deeper. Got the tender to pick us up on a night dive when I felt my buddy was spent!! Have had a buddy ditch me more than once. I do a deco stop and I always do a safety stop even if it make me a baby. Have had a buddy ditch me over and over and I kept rounding them up and trying to keep them from wandering off. Have been in a group of divers where they had 1000 or even 3000 dives and I was not willing to do what they did. They were at 100 feet, I was at 90 or even 80 right above them. Have gone to the guides on a live aboard trip, and asked them to give me an opinion, my buddy was itchy and sweaty. I thought some thing was wrong. Buddy had been pushing the limits, and it turned out they had skin bends. I was fine, I had been watching my gauges closely. I have had several chances to be stupid with divers who have a lot more experience than I do. I said no and I was ok, but it would have been really easy to go along with the stupidity!

212	anonymous	On a dive with a group, the dove leader insisted I continue the dove when I knew I needed to start my ascene
213	anonymous	My tank loosened and fell below me pulling the reg from my mouth. Couldn't figure out what had happened.fortunately my buddy saw my dangling tank and grabbed it. We surfaced from about 10 ft fortunately.
214	anonymous	Buddy and I were separated in low vis wreck dive. We followed proper lost buddy procedures, did a proper safety stop, and met at the surface. Occurred at end of our dive so we terminated our dive and debriefed on the boat.