

R.S.T.C. - Standards

IDA

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IDA is member of R.S.T.C.- Europe / CMAS-Germany/ A.B.R.E.-Spain

These standards contain the courses according to W.R.S.T.C. / R.S.T.C. - Europe!

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<u>Preamble</u>

The International **D**iving instructor **A**ssociation IDA (International Diving Association) has the aim to educate and further educate divers, skin divers, apnea divers and diving instructors worldwide by uniform standards and the up to date technical and safety relevant regulations. To contribute to a uniform diver and diving instructor education IDA has structured it's educational program basically in accordance with the CMAS and R.S.T.C. system.

The IDA and R.S.T.C. general standards for recreational diving are the base for these examination regulations / standards for divers and skin divers.

The course relevant education materials were developed entirely by IDA and are meant to be used by the diving instructors and trainers in active educational status.

IDA is member of the Recreational Scuba Training Council Europe (RSTC, a worldwide recognized education organization for recreational diving). The RSTC has established minimum standards and certifications (brevets) for diving education worldwide in use. By this IDA brevets are indefinitely valid and recognized all over the world.

Only diving instructors in an "active status" are permitted to work for IDA bases and schools to guarantee this uniformly education.

The IDA Education System

The education in the **IDA-diving qualification system** shall teach safe diving. Depending on the education level the training dives are monitored and safeguarded by a diving instructor, sometimes accompanied by experienced divers. IDA-Brevets are qualification certificates for specially identified activities by recreational divers, skin divers and apnea divers.

The IDA education system is modular. It builds step by step within the different education directions methodically on the previous one upwards.

Introductory Scuba Experience (ISO 11121): Prior to the regular diving training this TRY SCUBA course shall enable to a "get to know" of the recreational diving and is meant to help making the final decision whether to start with diving training.

IDA Basic Diver – Supervised Diver (ISO 24801-1/DIN EN 14153-1): The basic brevet is the foundation for this course. This course expands the basic brevet by the first two open water dives.

IDA Open Water Diver – OWD (ISO24801-2/DIN EN 14153-2): This course ends with the primary open water brevet. The OWD is qualified to participate in guided dives with divers of a higher brevet level or dive guides. The OWD-course can be started without any previous experience.

IDA* -Diver (CMAS*)(ISO24801-2/DIN EN 14153-2): This course is an alternative to the IDA Open Water Diver. It is expanded with parts from apnea diving and an additional open water dive. The IDA* Brevet enables the *-diver (one star diver) to participate in guided dives in open water together with divers of higher brevet level or dive guides. The IDA*- course can be started without previous experience.

IDA Junior Advanced Open Water Diver: The IDA Junior OWD expands the knowledge and qualification with this course and allows afterwards diving together with qualified partners independently down to 18m.

IDA Advanced Open Water Diver: The IDA OWD or IDA* diver expands his / her knowledge and qualification with this course and is afterwards qualified to dive together with a partner of the same qualification independently down to 30m.

IDA-Diver (CMAS**):** This diver is qualified to perform independent dives with partners of the same qualification down to 40m. An IDA OWD or IDA* diver can participate in this course without a previous participation in an IDA AOWD course.

IDA Master Diver (MD): The MD is an IDA^{**} diver having successfully absolved at least five IDA special courses. The participation in the special course diving safety and rescue (Rescue Diver) is mandatory. This level recognizes very experienced divers worldwide.

IDA*-Diver (CMAS***)(ISO24801-3/DIN EN 14153-3):** IDA*** divers are starting to take responsibility for diving novices. The IDA*** status qualifies very experienced recreational divers. In this course an IDA** diver can participate without having previously absolved the IDA Master Diver course.

IDA******-Diver (CMAS******): IDA***-divers having a special knowledge and qualification plus a high competence in certain fields with the focus on safety and emergency management can be certified to IDA**** divers.

Additional IDA-Brevet Systems

The diving in the special fields of cave diving, technical diving, side mount diving, apnea diving, RC Diving (diving with handicapped), children diving and diving with Rebreather systems is organized according to the IDA – standards in individual examination regulations.

IDA-Special Courses

Recreational divers can further educate themselves in multiple special fields of sports diving by signing in on special courses (Specialties). Some of these courses are required to qualify for the next brevet. Contents and prerequisites are laid out in the standards for special courses (examination rgulations for special courses).

Prerequisite Overview

Course	Minimum	Minimum	Minimum	Minimum	Ratio
	qualification	age	number of	qualification	DI/St
	participant	participant	dives	Diving Instructor	
Skin Diver 1	none	10	none	Ass. Diving Instr.	1:6
Skin Diver 2	none	12	none	ADI	1:4
Introductory Scuba Diving	none	8	none	DI * and higher	1:4
Junior Diver 1	none	8	none	ADI	1:2
Junior Diver 2	none	8	none	ADI	1:2
Scuba Diver	none	10	none	ADI	1:4
Basic Brevet	none	12	none	ADI	1:4
Basic Diver	none	12	none	ADI (with add. qualification)/DI*	1:4
Scuba Review	none	10	none	DI*	1:4
Junior OWD	none	10	none	DI*	1:1
OWD	none	14	none	DI*	1:4
IDA*	none	14	none	DI*	1:4
Junior AOWD	none	12	none	DI*	1:2
AOWD	OWD/IDA*	14	none	DI*	1:4
IDA**	OWD/IDA*	16	25 from that 10 on 15-25 m	DI**	1:4
Master Diver	IDA**	18	50 from that 10 on 15-25 m	DI**	1:4
IDA***	IDA**	18	65 (IDA**) from that 10 on 28 – 30 m	DI**	1:4
IDA****	IDA***	20	165 with 100 as an IDA***	DI**	

DI: Diving Instructor – ADI: Assistant Diving Instructor

Introductory Scuba Experiences

1. Scope and Purpose

This standard provides minimum program content requirements for introductory scuba experiences in recre-ational diving. These requirements, under no conditions, are considered standards for certification in the use of scuba. Instead, these requirements are used to introduce the non-diver to recreational scuba diving via a supervised, controlled dive experience, and to encourage the participant to seek further training. The experi-ence may be conducted anywhere a controlled, enjoyable introduction to diving can be provided. Because the introductory diving program does not result in certification, but is experiential in nature, in-depth knowl-edge of diving academics and skills is not necessary. Participants are taught only what is necessary of them to experience scuba diving under direct supervision.

Program standards require that participants are taught specific information, concepts and scuba skills. The requirements of this standard are meant to be comprehensive, but general in nature.

Although the information categories outlined are given in what appears to be a logical sequence, the out-line should not be viewed as a lesson plan. That is, the order in which the information is presented in this standard, while logical as a framework for the basic requirements of this standard, does not necessarily define the sequence of the program lesson plan. Similarly, the requirements presented in this document do not indicate the emphasis which should be placed on a particular subject area, or the manner in which these subjects are taught. Rather, the outlines, lesson plans and other training aids prepared by training organiza-tions responsible for recreational diver training are used as guidelines for the sequencing and emphasis of program content requirements presented in this standard. Decisions as to sequencing and emphasis are at the discretion of the instructor within the requirements of the instructor's training organization, and are made within the context of environmental factors, participant characteristics and other relevant considerations.

Completion of an Introductory Scuba Experience does not entitle or allow the participant to procure air, scuba equipment, or any other scuba diving services, nor does it allow the individual to engage in recre-ational diving without direct supervision by an instructor (see definitions). It is the intent of thisstandard that Introductory Scuba Experience participants will be introduced to the limited academic and skill portions of the experience by an instructor.

2. Definitions

certified assistant. An individual who is currently certified by a training organization to assist an instruc-tor. By the intent of this standard, all activities of a certified assistant shall be under the supervision of an instructor. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver-rescue techniques is required before a certified assistant may as-sume responsibility for any participants during open water dives, as defined in this document. The certified assistant shall also have passed a written examination demonstrating certified assistant-level knowledge, as required by the training organization. (See the RSTC Recreational Dive Supervisor and RSTC Recreational Assistant Scuba Instructor Certification standards for details).

confined water. Any body of water that offers conditions similar to those of a swimming pool.

instructor. An individual who is currently certified and sanctioned by a training organization to conduct introductory scuba dives, teach entry-level scuba diving and to authorize the issuance of entry-level certification. To be sanctioned, the instructor meets the annual renewal requirements of the sanctioning organiza-tion. An instructor has completed formal training in lesson preparation, planning and delivery of lecture, pool/confined water skills and open water skills teaching presentations, in addition to completing the train-ing requirements of a certified assistant (see definition). The instructor has also passed a written examination demonstrating instructor-level knowledge, as required by the training organization. (See RSTC Recreational Scuba Instructor Certification standards for details.)

introductory scuba dive. An open water scuba dive made under the direct supervision of an instructor to introduce participants to the fun and adventure of recreational diving. The dive does not result in certifica-tion. The dive includes the following minimum components: 1) a briefing, 2) preparation to dive, 3) an en-try, 4) an underwater tour, 5) a maximum depth not to exceed 40 feet/12 metres, 6) an exit, 7) a debriefing.

minimum instructional diving system. The equipment required to be worn by the participants includes: fins, mask, cylinder and valve, regulator/air delivery system, buoyancy control device with low-pressure inflator, back pack, submersible pressure gauge, weight ballast system (if appropriate), exposure suit (if ap-propriate).

participants. Individuals who want to experience scuba diving by making introductory scuba dives and not receive certification.

supervision. The following levels of supervision apply as outlined in Section 5.

direct supervision. Visual observation and evaluation of participant skill introduction and development during diving activities by an instructor or certified assistant. Direct supervision requires personal observa-tion and evaluation of the skills introduced and developed in the program. During skills introduction and development, direct supervision requires the participant to be accompanied underwater. During the initial introductory scuba dive, direct supervision

requires an instructor to accompany the participant underwater and be in control of the participant. Subsequent dives may be led by a certified assistant with reduced ratios as required by the training organisation..

indirect supervision. The overall control, general observation, evaluation and direction of the participant skill performance and participant diving activities. The instructor must be personally present at the dive site and be prepared to come to the aid of a participant.

3. Eligibility for Participation

(1) Age. The minimum age for participation is determined by the training organization.

(2) **Medical History/Statement.** Participants in the experience shall complete the medical history/statement form required by the training organization prior to in-water activities. Participants shall comply with all stipulations thereon before in-water activities. It is required that participants who answer yes to questions on medical history be recommended, without conditions or restrictions, by a licensed medical practitioner prior to engaging in water activities. In no event will medical approval be accepted when the person signing the approval is the participating individual.

(3) Acknowledgment and Assumption of Risk. Participants are informed of the risks of scuba and sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, by are not limited to: liability release, waiver and release of liability, affirmation and liability release, limitation of liability, assumption of risk, safe diving practices, standards for safety, state-ment of understanding. Parental or legal guardian signature is required on the appropriate form(s) when the participant is a minor.

(4) **Scuba Skills.** The participant will satisfactorily demonstrate to an instructor the scuba skills required by the training organization and as outlined in 4.4. The instructor shall follow appropriate in-water training parameters in conducting the scuba skills, as required by the training organization and outlined in Section 5.

4. Minimum Course Content

The Introductory Scuba Experience consists of topics and skills required by the training organization and as

outlined in this section.

4.1 Introduction. The following information should be made available to participants

before the program.

- (1) Limitation of program
- (2) The need and value of seeking further training.
- (3) Risks of scuba diving
- 4.2 Equipment. Introductory information on the use of the following equipment items.
 - 4.2.1 Mask
 - 4.2.2 Fins
 - 4.2.3 Buoyancy control device/buoyancy compensator

- 4.2.4 Regulator/air delivery system
- 4.2.5 Submersible pressure gauge/air monitor
- 4.2.6 Alternate air source (octopus/safe second)
- **4.3 General Knowledge.** Introductory information to diving and the diving environment.
 - 4.3.1 Reasons for breathing continuously during the introductory dive
 - 4.3.2 Equalization techniques
 - 4.3.3 Avoiding hazardous aquatic life
 - 4.3.4 Hand signals
 - 4.3.5 Necessity for seeking further training, and where to obtain it

4.4 Scuba Skills. The following scuba skills shall be required to be introduced to and demonstrated by participants in pool or confined water prior to the introductory scuba dive.

4.4.1 Underwater breathing

4.4.2 Mask clearing

4.4.3 Mouthpiece retrieval

4.4.4 Mouthpiece clearing

4.4.5 Ear clearing/equalization techniques

5. Pool/Confined Water Training Parameters

It is consistent with Section 1, Scope and Purpose, that during any in-water training activities the instructor must be present. Participants shall be introduced to and must demonstrate the skills listed in 4.4. All scuba skills shall be directly supervised by the instructor. The instructor shall conduct the final evaluation to deter-mine the participant=s performance is satisfactory to participate in an introductory scuba dive.

5.1 The minimum equipment to be worn by an instructor while conducting pool/confined water training consists of the equipment listed in Section 2 under the definition of "minimum instructional diving system," plus an alternate air source.

5.2 The maximum number of participants for pool training is eight per instructor. The maximum number of participants in confined water is four per instructor (4:1) or six per instructor (6:1) with a certified assistant. Although additional assistants may be used, no additional participants may be added to the responsibility of the individual instructor. At poor visibility a ratio from 1:1 is mandatory. Poor visibility is given when visibility is less than 5 meters.

5.3 All introductory scuba skills shall be conducted during daylight hours, in a swimming pool or in con-fined water shallow enough for the participant to stand up in. When water shallow enough to stand up in is not available, these skills may be conducted from a device such as a descent line or platform within six feet of the surface with reduced ratios as required by the training organization. A ratio from 1:1 is mandatory if the student can't stand up in. The max depth for the first lessons is 2 meter.

6. Introductory Scuba Dive Parameters

It is consistent with Section 1, Scope and Purpose, that all initial open water introductory scuba dives shall be directly supervised by the instructor.

6.1 The maximum number of participants for introductory scuba dives is four per instructor (4:1) or six per instructor (6:1) with a certified assistant. Although additional assistants may be used, no additional partici-pants may be added to the responsibility of the individual instructor. At poor visibility a ratio from 1:1 is mandatory. Poor visibility is given when visibility is less than 5 meters.

6.2 All introductory scuba dives shall be conducted during daylight hours, at depths not to exceed 40 feet/12 metres and in water that allows direct vertical access to the surface.

6.3 During any introductory scuba dive, the instructor has the option to delegate responsibility for direct supervision to a certified assistant for the purposes of escorting participants during surface excursions and exits.

6.4 The minimum equipment to be worn by an instructor while conducting introductory scuba training in confined water consists of the equipment listed in Section 2 under the definition of "minimum instructional diving system," plus a dive knife/diver's tool (unless prohibited by law or regulation at the dive site), alter-nate air source, and an emergency-signaling device. When appropriate, the use of a surface support-station with dive flag is also encouraged. If other water sports enthusiasts (surfers, sailors) and/or ship traffic are to be expected, setting an alpha flag is mandatory.

6.5 During the initial introductory scuba dive, while the instructor is attending to the needs of one participant, certified assistants may temporarily directly supervise the remaining participants. 6.6 During any introductory scuba dive, instructors may not engage in any activities other than direct supervision. If other activities such as video or photography are conducted, then a separate certified assistant is to be used for those activities.

Aim of the course

The participant shall be interested to start a beginner course with an easy dive in a pool or under pool like conditions during daylight conditions. He / she shall be kept under direct supervision by an IDA instructor. An assistant can be deployed to increase security. During a Try Scuba dive, the instructor must be fully focused on the student and not engage in any other activities such as filming or photography. It is explained to the participant that he must follow the instructions of the diving instructor in order to avoid health consequences. Diving is not a dangerous sport if you stick to what you have learned in theory and practice. Nevertheless, the risks are pointed out, e.g. For example, if you hold your breath when you surface or if the pressure equalization is not carried out correctly. A completed introductory dive does not entitle the participant to conduct independent dives. Participation in one of the numerous diving courses of the IDA is recommended.

Prerequisites:

- Minimum age: 14 years, with minors a written letter of consent from the legal guardians (normally both parents) is required.
- Self-declaration of medical fitness (with minors the signature of the legal guardians is required). IDA recommends a valid dive medical certificate.
- Form liability / participation regulations
- Experience level: -none-

To avoid injury, participants are instructed to breathe underwater the same way they breathe above water and should never hold their breath. This is especially true for ascension. The importance of pressure equalization in the mask and in the middle ear should be emphasized. All necessary hand signals are to be conveyed. Since, in the event of contact, injury from marine animals or sea plants cannot be ruled out, nothing should be touched and a minimum distance of 2 meters should be maintained from all animals and plants. To become a good diver you need a good education and a lot of experience. IDA offers many different courses to expand knowledge.

At the beginning of the dive, the depth should be chosen so that the participant, if not feeling well, can stand up and lift their head out of the water. It must be ensured at all times that the participant can surface directly to the water surface. Carrying a rescue kit including oxygen is recommended. The safety of the participant must be guaranteed at all times.

Theoretical Part

Curriculum:

- Explaining and selecting (e.g. fit) the correct ABC equipment.
- Explaining the correct selection and adjustment of the scuba system.
- Under water hand signs.
- Explaining the correct pressure equation method(s).
- Briefing of the try scuba encounter.
- Breathing underwater
- Mask clearing
- Mouthpiece clearing
- Regain the Mouthpiece if lost

Practical Part

(maximum diving depth 6 m, duration at least 15min.)

Exercise curriculum:

- Use of mask, fins and snorkel.
- Assembly and disassembly of the SCUBA equipment (outside the water).
- Entering and leaving the water correct.
- Clearing and using of snorkel and 2nd stage regulator and octopus.
- Controlled descent and ascent (e.g. pressure equation in ears and mask) and use of the BCD.
- Swimming underwater.
- Clearing the mask.
- Buoyancy under water and on the surface.
- Reacting when receiving alternative air support.
- Reaching for the regulator
- Equipment care.
- Basic underwater hand signs.

Basic Diver - Supervised Diver

1. Scope and Purpose

This standard provides minimum course content requirements for instruction leading to supervised diver certification in recreational diving with scuba (self-contained underwater breathing appa-ratus). The intent of the standard is to prepare a non diver to the point that he can enjoy scuba diving in open water under controlled conditions—that is, under the supervision of a diving professional (instructor or certified assistant – see definitions) and to a limited depth. These requirements do not define full, autonomous certification and should not be confused with Open Water Scuba Certification. (See Recreational Scuba Training Council Minimum Course Content for Open Water Scuba Certification.) The Supervised Diver Certification Standards are a subset of the Open Water Scuba Certification standards. Moreover, as part of the supervised diver course content, supervised divers are informed of the limitations of the certification and urged to continue their training to obtain open water diver certification.

Within the scope of supervised diver training, the requirements of this standard are meant to be com-prehensive, but general in nature. That is, the standard presents all the subject areas essential for su-pervised diver certification, but it does not give a detailed listing of the skills and information encom-passed by each area. For example, these minimum specifications require that the course must cover topics as outlined section 4. Those items are simply listed in this standard; training organizations pub-lish detailed course outlines that meet this standard, which include specific techniques and procedures.

Although the information categories are outlined in what may appear to be a logical sequence, the outline is not a lesson plan. That is, the order in which the information is presented in this stan-dard, while logical as a framework for the basic requirements of this standard, does not necessarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed upon a particular subject area, or the manner in which subjects are taught. Rather, course outlines, lesson plans, and other training aids prepared by training organizations responsible for recreational diver training are used as guidelines for the sequencing and emphasis of course content requirements presented in this standard. Decisions as to sequencing and emphasis are at the discretion of the certifying instructor within the requirements of the instructor's training organization, made within the context of environmental factors, student characteristics and other relevant considerations.

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Supervised diver certification qualifies the bearer to dive under the direct supervision of a diving professional (instructor or certified assistant—see definitions) while applying the knowledge and skills they learn in this course, within the limits of their training and experience. This pre-entry level certi-fication addresses consumers that have personal time constraints and/or who prefer to dive supervised. It is the intent of this standard that supervised divers will receive training in the fundamentals of recre-ational diving from an instructor (see definition). The certified supervised diver can plan, conduct and log open water no required decompression dives when properly equipped and directly supervised by an instructor or certified assistant.

2. Definitions

certification. A Certification Card ("C-Card") documenting that a student has completed all requirements of supervised diver diving certification course. This verification is issued by training organizations upon receipt of an instructor's written confirmation of satisfactory completion of all course requirements by the student, as documented in the student's log/training record.

certified assistant. An individual who is currently certified by a training organization to assist an instructor. By the intent of this standard, all activities of a certified assistant in open water courses shall be under the supervision of an instructor. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver rescue tech-niques is required before a certified assistant may assume responsibility for any student or students during open water training dives, as defined in this document. The certified assistant shall also have passed a writ-ten examination demonstrating certified assistant-level knowledge, as required by the training organization. (See the RSTC Recreational Dive Supervisor and RSTC Assistant Scuba Instructor certification standards for details).

confined water. Any body of water that offers conditions similar to those of a swimming pool.

excursion dive. A dive without formal performance requirements made prior to completion of all open water training dives.

instructor. An individual who is currently certified and sanctioned by a training organization to teach open water scuba diving and to authorize the issuance of open water certification. In order to be sanctioned, the instructor shall meet the annual renewal requirements of the sanctioning organization. An instructor shall have completed formal training in lesson preparation, planning and delivery of lecture, pool/confined water skills and open water skills teaching presentations, in addition to completing the training requirements of a certified assistant (see definition). The instructor shall also have passed a written examination demonstrating instructor-level knowledge, as re-quired by the training organization. (See the RSTC Recreational Scuba Instructor certification standards for details).

minimum instructional diving system. The equipment required to be worn by students while performing the skills listed in 4.6. This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low-pressure inflator, regulator, alternate air source (ac-tive scuba/air delivery system), submersible pressure gauge, weight ballast system, and exposure suit (e.g., wetsuit, dry suit, etc. if appropriate). Additional desirable (but not required) equipment includes a timing device, depth gauge, and compass/direction monitor.

supervised diver course. A pre-entry level certification course of scuba training leading to certification which allows the diver to dive under supervision, issued by a training organization.

Successful completion of the supervised diver course qualifies an individual to engage in recreational open water diving under the direct supervision of a certified assistant or instructor.

open water course. A course of scuba training leading to autonomous diver certification, issued by a train-ing organization. Successful completion of a course that meets the requirements of the RSTC Minimum Course Content for Open Water Diver Certification qualifies an individual to procure air, equipment, and other diving services and to engage in recreational open water diving without supervision.

Open water scuba training dives. Supervised, open water scuba training experiences to fulfill certification requirements. Training dives shall consist of the exercises outlined in 4.6 and as required by the training organization. Each dive shall include, as minimum: (1) a briefing; (2) preparation to dive; (3) an entry; (4) at least 15 minutes at depths between 15 and 40 feet (5 and 12 metres); (5) an exit; (6) a debriefing; (7) logging the dive in student's personal logbook .

out-of-air emergency alternatives. Procedures allowing a diver to ascend to the surface in the

event of an out-of-air situation. Dependent procedures include: alternate air source; buddy breathing; redundant air supply (provided by buddy). Independent procedures include: emergency ascent; redundant air supply.

supervision (pool/confined water and open water). The following levels of supervision apply as outlined in Section 5. If local regulations specify a higher level of supervision than outlined in the RSTC Standards, instructors should follow these regulations to ensure compliance with local government requirements.

direct supervision. Visual observation and evaluation of student skill performance and

student diving activities by an instructor or certified assistant. Direct supervision requires personal obser-vation and evaluation of the performance of the skills required for certification. During underwater skill performance and evaluation, direct supervision requires the student to be accompanied underwater.

indirect supervision. The overall control, general observation, evaluation, and direction of

student skill performance and student diving activities. The instructor must be personally present at the training site and be prepared to come to the aid of a student.

3. Eligibility for Certification

In order to qualify for supervised diver certification, a student shall meet the following minimum prerequi-sites:

(1) Age. The student shall be at least 15 years of age, there is no upper limit. Students under the minimum age who meet supervised diver performance requirements may qualify for a special certification.

(2)**Physical Conditioning and Watermanship Evaluation.** The student shall effectively demonstrate basic watermanship ability by performing, to an instructor, the watermanship evaluation re-quired by a training organization

(3)**Medical History/Statement.** Applicants to a course shall complete the medical history/statement form required by the training organization prior to in-water activities. Applicants shall comply with all stipulations thereon before continuing in-water training. It is required that applicants with out-of-the-ordinary medical histories be approved, without

conditions or restrictions, as medically fit for diving by a licensed medical practitioner prior to engaging in water activities. In no event will medical approval be accepted when the person signing the approval is the participating individual.

(4)Acknowledgment and Assumption of Risk. Applicants to a course shall be informed of the inherent risks of scuba and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation and liability release; assumption of risk; limitation of liability; safe diving practices; standards for safety; statement of understanding; etc. Parental or legal guardian signature is required on the appropriate form(s) when the applicant is a minor.

(5)**Knowledge.** When available in the student's primary language, the student shall use a dive-training manual approved by the training organization to study from during the course. The

student shall demonstrate supervised diver level knowledge of scuba diving by taking and passing an oral or written examination. Documentation of the examination shall be retained by the instructor or facility for at least 5 years. This examination shall test knowledge of equipment (as listed in 4.2), physics of diving (4.3), medical problems related to diving (4.4), pool/confined-water scuba skills (4.5), and open water scuba skills (4.6), to be presented in the course and as specified by the training organization.

(6)**Scuba Skills.** The student shall satisfactorily demonstrate, to an instructor, the scuba skills required by the training organization and as outlined in 4.5 and 4.6 covering pool/confined water and open water scuba skills, respectively. The instructor shall follow the appropriate in-water training parameters in conducting the scuba skills, as required by the training organization and outlined in Section 5.

4. Minimum Course Content

The course shall consist of the topics and scuba skills required by the training organization and as outlined in this section.

4.1 Introduction. The following information should be made available to students before or during the first class meeting.

- (1) Certification requirements (see Section 3)
- (2) Class requirements

(a) cost

- (b)insurance options/requirements
- (c) contractual agreement
- (3) Scope of course

(a) Content(b) Limitations of eventual qualification

- (4) Equipment requirements
- (5) Course procedures

4.2 Equipment. Open water level information on the physical description, operating principles, maintenance, and use of the equipment items. The subcategories of information that are to be taught about the face mask are presented as examples of recommended course detail in covering the physical description, main-tenance, and competent use of each equipment item. For similar detail regarding each of the other items, reference the training organizations' published detailed course outlines.

4.2.1 Face Mask

- (1) Physical description/selection
 - (a) Fit
 - (b)Lens (including prescription/optical)
 - (c)Skirt
 - (d)Band
 - (e)Strap
 - (f) Locking device
 - (g)Equalizer
 - (h)Purge
 - (i) Shape/volume

(2) Maintenance

- (a) Inspection
- (b) Cleaning
- (c) Storage

(3) Use

- (a) Defogging
- (b) Donning
- (c) Sealing
- (d) Clearing
- (e) Equalizing

4.2.2 Fins

- 4.2.3 Snorkel
- 4.2.4 Buoyancy Control Device/Buoyancy Compensator
- 4.2.5 Exposure Suit/Exposure System/Environmental Suit
- 4.2.6 Weights and Belt/Weight System/Ballast System
- 4.2.7 Cylinders/Tanks and cylinder support systems
- 4.2.8 Valves
- 4.2.9 Regulators/Air-Delivery System
- 4.2.10 Submersible pressure Gauge/Air monitor
- 4.2.11 Alternate Air Source (octopus/safe second/redundant air system/pony bottle, etc)

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- 4.2.12 Timing Device (watch/time monitor)
- 4.2.13 Compass/Direction Monitor
- 4.2.14 Depth Gauge/Depth Monitor
- 4.2.15 Knife/Diver's Tool

4.3 Physics of Diving. Open water level information on the physical principles of matter and their application to diving activities and hazards.

- (1) Sound
- (2) Light
- (3) Buoyancy
- (4) Pressure/gas laws
- (5) Temperature

4.4 Medical Problems Related to Diving. Open water level information on the causes, symptoms, preven-tion, and first-aid and treatment of diving medical problems.

- 4.4.1 Direct Effects of Pressure
- (1) Descent (squeezes/barotrauma)
 - (a) Ears
 - (b) Sinuses
 - (c) Mask
 - (d) Lungs
 - (e) Suit
 - (f) Teeth

(2) Ascent

- (a) Gas expansion (ears, sinuses, lungs, stomach, intestines, and teeth)
- (b) Lung over pressurization/overexpansion injuries
- (c) Vertigo

4.4.2 Indirect Effects of Pressure (Physiological)

- (1) Decompression sickness
- (2) Medication, drugs and alcohol
- 4.4.3 Hazards
- (1) Fatigue and exhaustion
- (2) Stress and panic
- (3) Exposure/hypothermia/overheating
- (4) Inadequate ventilation (hypoventilation)
- (5) Carotid-sinus reflex
- (6) Injuries by aquatic animals and plants
- (7) Drowning/secondary drowning

4.5 Dive Environment. Open Water level information on the local and general conditions of the diving environment and their possible effects on the diver.

4.6 General. Open Water level information on other topics.

- (1) Emergency procedures including buddy separation procedures
- (2) Accident management/prevention
- (3) Communications, both underwater and on the surface

4.7 Pool/Confined Water Scuba Skills. The following scuba skills shall each be required to be taught to students in pool/confined water prior to that skill being performed in the open water.

- (1) Diving system assembly and disassembly
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing snorkel and regulator
- (6) Regulator/snorkel exchanges at the surface
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask-clearing, including removal and replacement
- (10) Buddy-system techniques
- (11) Basic instrument monitoring
- (12) Underwater and surface buoyancy control
- (13) Underwater problem-solving (regulator recovery/retrieval, etc)
- (14) Surface-snorkel swimming with full diving system
- (15) Surface operation of the quick release/emergency function of the weight system

(16) Out-of-air emergency alternatives, including at least one dependent procedure and one independent procedure

(17) Equipment care and maintenance (at water's edge)

4.8 Open Water Scuba Skills. These open water scuba skills are to be performed while diving in the open water, wearing a minimum instructional scuba diving system.

- (1) Diving system assembly and disassembly (at water's edge)
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper Weighting
- (5) Mouthpiece clearing snorkel and regulator
- (6) Regulator recovery
- (7) Regulator/snorkel exchanges at the surface
- (8) Controlled descents and ascents
- (9) Underwater swimming
- (10) Mask-clearing
- (11) Buddy-system techniques
- (12) Basic instrument monitoring
- (13) Underwater and surface buoyancy control
- (14) Diver assistance techniques (self/buddy)
- (15) Surface-snorkel swimming with full diving system
- (16) Surface operation of weight quick release system

5. In-water Training Parameters

It is consistent with Section 1, Scope and Purpose, that during any in-water training activities the instructor must be present.

5.1 Pool/Confined Water Training Parameters. Students shall receive their initial training of each scuba skill under the direct supervision of the instructor. Further skill development may continue under direct supervision of certified assistants and indirect supervision of the instructor. The instructor shall conduct the final evaluation to determine the satisfactory skill performance of each student.

5.2 Open-Water Training Parameters. Students to be certified shall complete at least two open water scuba training dives according to the procedures required by the training organization and as outlined in this section. All scuba skills shall be directly supervised by the instructor until satisfactory performance has been demonstrated.

5.2.1 The minimum equipment to be worn by an instructor while conducting open water

training consists of the required and desirable equipment listed in Section 2 under the definition of "minimum instructional diving system," plus a dive knife/diver's tool (unless prohibited by law or regulation at the dive site) and an emergency-signaling device. When appropriate, the use of a surface supportstation with dive flag is also encouraged.

5.2.2 The maximum number of students for in-water training is eight students per instructor. Two additional students per certified assistant may be added up to a maximum of 12 students per instructor. Although additional assistants may be used, no additional students may be added to the responsibility of the individual instructor. These ratios are considered maximum and should be reduced if environmental conditions or other factors are not optimum.

5.2.3 All dives prior to open water certification shall be conducted during daylight hours* at

depths between 15 and 40 feet (5 to 12 metres). Dives shall not be conducted in any situation

where direct vertical access to the surface is not possible. Aquatic plants are not considered an

overhead obstruction.

*Exceptions are allowed when artificial light permanently installed at the dive site is sufficient to simulate

daylight diving conditions and is approved by the training organization

5.2.4 No more than three open water scuba dives may be conducted on a given day. These dives may be a combination of required training dives and additional excursion dives.

5.2.5 During any open water scuba training dive, the instructor has the option to delegate responsibility for direct supervision to certified assistants for the purpose of escorting students during surface excursions and exits. 5.2.6 During any open water scuba training dive, while the instructor conducts a skill, certified assistants may temporarily directly supervise the remaining students.

5.2.7 Following satisfactory student performance of the skill evaluations during the second open water scuba training dive, the instructor has the option to delegate responsibility for direct supervision to certified assistants for the purpose of escorting students during underwater tours, with indirect supervision by the instructor. Any excursion dives conducted prior to the satisfactory performance of the skill evaluations for the first training dive are to be conducted under the direct supervision of the instructor and are not to exceed a depth of 40 feet/12 metres.

5.2.8 The maximum number of students per certified assistant for the escorting of students during underwater tours is two.

IDA Basic Diver – Supervised Diver

Aim of the course

The course is meant for a participant aiming to become a certified diver, but without enough time for the IDA OWD course or the IDA* course. This course holds all required basics of diving theory, the four (4) exercise dives in a pool or under pool like conditions that are also part of the IDA OWD or the IDA* course and the apnea exercises of the IDA* course and the first two open water dives for the IDA OWD / IDA* courses.

Prerequisites

- Minimum age 12 years With minors a written letter of consent from the legal guardians (normally both parents) is required
- Self-declaration of medical fitness (with minors the signature of the legal guardians is required). IDA recommends a valid dive medical certificate.
- Form liability / participation regulations
- The closure of dive medical insurance, especially for the liability of dive accidents (e.g. pressure chamber treatment) is strongly recommended (e.g. AQUAMED), since this kind of treatment is not covered by the health insurance.
- Education level: none -

Remark:

When presenting an IDA-apnea-recreational-diving-brevet less than 3 years old the equivalent exercises without scuba system can be skipped.

When presenting an IDA Basic Brevet less than 15 month old the theory and the pool units can be skipped.

Theoretical Part

Curriculum:

- Explaining and selecting (e.g. fit) the correct ABC equipment.
- Explaining the correct selection and adjustment of the scuba system.
- Briefing and under water signs (UW-signs).
- Safety when diving and the Buddy system.
- Explaining the correct pressure equation method(s).
- Basics dive medicine.
- Basics dive physics.
- Basics dive technique.
- Basics for planning a dive.
- Base knowledge of emergency management.
- Environmental protection and marine life forms.
- Ways for a further education after this course.
- Written Test

Practical Part

Dive 1 in a pool / under pool like conditions

- Correct preparation of mask, snorkel, fins, buoyancy control device (BCD), scuba system and weight belt, adjusting and donning by the help of the partner.
- At the surface inflate and deflate the BCD with the inflator.
- Demonstrate the correct breathing technique and remind the student never to hold the breath at any time.
- Clear the regulator under water.
- Regaining the primary regulator from behind the shoulder under water.
- Clear the partially flooded mask under water.
- Swim and control depth and direction in complete diving equipment under water.
- Perform pressure equation for ears and mask under water.

- Read pressure gauge and signal remaining air supply under water.
- Read and signal standard UW-signs under water.
- Safe ascent.
- Depart water.

Dive 2 in a pool / under pool like conditions

- Buddy check prior to the dive.
- Correct entry into deep water.
- Blow the snorkel with the correct method; continue breathing through the snorkel without taking the face out of the water.
- At the surface, switch from snorkel to the regulator without taking the face out of the water.
- Swim at least 50m at the surface in complete scuba equipment and breathe through the snorkel.
- Perform a correct descent and show the individual steps clearly.
- Take the mask off, put it on again and clear it under water.
- Breathe for at least 1min without mask under water.
- Breathe for at least 45sec from the alternative air supply of a partner under water and remain stationary.
- Perform a correct ascent and show the individual steps clearly.
- Inflate the ADV with your mouth at the surface and release the air afterwards totally.
- Decide the required correct amount of lead at the surface.
- With a minimum of help release the weight system by using the fast release mechanism at the surface.
- Takeoff weight system and scuba system (if required) in the water, takeoff fins and leave the water in the best possible way.

Dive 3 in a pool / under pool like conditions

- Buddy check prior to the dive.
- Jump into the water: Two (different) jumps with complete scuba system on from a height of ¹/₂m and continue with a controlled descent in deep water.
- Pivoting: Gain neutral buoyancy without help by balancing on the tips of the fins.
- Hovering: Stay buoyant motionless for at least 45sec without moving arms or legs.
- Open up a lower leg cramp.
- Simulate a controlled emergency ascent by letting go the regulator and exhaling continuously breath while slowly ascending to the surface.
- Tow / push a tired diver 25m at the surface.
- Depart water.

Dive 4 in a pool / under pool like conditions

- Buddy check prior to the dive.
- Correct entry and controlled descent into deep water.
- Dive without mask for at least 15m and then put on the mask and clear it under water.
- Perform partner air supply stationary.
- Take off the scuba system with little help at the ground and then take it back on to a fit.
- Take off the weight belt (alternative the weight pouches of the jacket or the suspender belt weight system) at the ground (or in shallow water).
- Perform a controlled ascent to the surface and perform a safety stop of 3min at 3m (if the depth conditions allow).
- Snorkel for 10min in belly position with scuba system at the surface.
- Depart the water.

Exercises with ABC-equipment:

These exercises may be done prior to the pool dives (sequence irrelevant) or as a single compact pool unit.

- Apnea time diving for 30sec with a continuous change in location (of about 10m).
- Apnea distance diving covering 25m without suit and 20m when wearing a neoprene suit.
- Apnea deep diving by three times down to 2 to 5m within one minute.
- Snorkeling for 20min by covering at least 500m with 5min in belly, back, side position each and 5min with one fin only.
- Snorkel 50m towards a scuba diver who is down between 2 and 5m and bring this one to the surface. Transport the scuba diver 50m at the surface.

Open Water Dive No.1:

Depth 6-15m/Duration at least 15min

- Briefing with motivation for the dive and assembly of scuba equipment.
- Complete and correct donning with equipment check prior to the dive.
- Buddy check prior to the dive
- Correct entry into the water.
- Buoyancy control / lead check at the surface, adjust weight in such a manner that the water level is in eye height with empty ADV when drifting under normal breath.

- Controlled descent down to a max. of 15m at a buoy rope or in reference to the bottom contour.
- First buoyancy exercises (e. g. pivoting)
- Receive and understand UW-signs and give UW-signs.
- Retrieve regulator.
- Remove mask, put it back on and clear it in a shallow area.
- Explore the underwater world.
- Ascent to the surface.
- Departing the water.
- Equipment maintenance after the dive.
- Debriefing and entry into the logbook.

Open Water Dive No.2:

Depth 6-15m/Duration at least 15min

- Briefing with motivation for the dive and assembly of scuba equipment.
- Complete and correct donning with equipment check prior to the dive.
- Buddy check prior to the dive
- Correct entry into the water.
- Buoyancy control / lead check at the surface, adjust weight in such a manner that the water level is in eye height with empty ADV when drifting under normal breath.
- Controlled descent down to a max. of 15m at a buoy rope or in reference to the bottom contour. The single steps must be presented clearly.
- Buoyancy control exercises using the inflator (e.g. pivoting) with gaining neutral buoyancy in three different depth levels.
- Dive towards dive partner and signal air emergency situation; breathe from the alternative air supply of the partner and continue dive for another 5min. Continue exercise and shift positions (give and receive).
- Explore the underwater world, exercise buoyancy control and the fife (5) mandatory UW-signs.
- Ascent to the surface with presenting the single steps clearly. Keep contact to the dive partner and never exceed the maximum ascending speed.
- Departing the water.
- Equipment maintenance after the dive.
- Debriefing and entry into the logbook.

Success control

The instructor will recall the positive impressions the participant had after every dive and answer questions about recreational diving. He / she must monitor the work on the theory modules and verify the result by the final exam.

Certification / Registration

The certification of the successful participation in this course is going to be documented by the instructor and the participant in the course sheet by signature. The registration will be done by the IDA main office with the issue of PIC and the brevet card. Additionally a sticker for a diver's pass and a certificate may be issued.

Entitlement

After the successful completion of this course and within the next 12 month the participant may finish the education to IDA OWD or IDA* Diver by absolving the required open water dives The successful participation in this course entitles to take part in by dive guide, assistant instructor or diving instructors guided dives with scuba system in open water down to a water depth of 12m.

Open Water Diver

1. Scope and Purpose

This standard provides minimum course content requirements for instruction leading to open water certification in recreational diving with scuba (self-contained underwater breathing apparatus). However, these requirements should under no conditions be considered to define a level of optimum training in the use of scuba. Instructional programs that extend beyond these requirements should, in fact, be encouraged. Some states, provinces or countries may have additional regulations for entry-level scuba training. Instructors should be aware of requirements in their local areas and adhere to the additional protocols when conducting training.

The requirements of this standard are meant to be comprehensive, but general in nature. That is, the standard presents all the subject areas essential for open water scuba certification, but it does not give a detailed listing of the skills and information encompassed by each area. For example, these minimum specifications require that an open water certification course must cover the physical description, operating principles, and maintenance of at least the items of equipment listed in 4.2. Those items are simply listed in this standard; training organizations shall publish detailed course outlines that meet this standard, which would include specific techniques for the use and maintenance of each item.

Although the information categories are outlined in what may appear to be a logical sequence, the outline shall not be viewed as a lesson plan. That is, the order in which the information is presented in this standard, while logical as a framework for the basic requirements of this standard, does not necessarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed upon

a particular subject area, or the manner in which subjects are to be taught. Rather, course outlines, lesson plans, and other training aids prepared by training organizations responsible for recreational diver training shall be used as guidelines for the sequencing and emphasis of course content requirements presented in this standard. Decisions as to sequencing and emphasis are at the discretion of the certifying instructor within the requirements of the instructor's training organization, to be made within the context of environmental factors, student characteristics, and other relevant considerations.

Open water certification qualifies a certified diver to procure air, equipment, and other services and engage in recreational open water diving without supervision. It is the intent of this standard that certified open water divers shall have received training in the fundamentals of recreational diving from an instructor (see definition). A certified open water diver is qualified to apply the knowledge and skills outlined in this standard to plan, conduct, and log open-water, no-required decompression dives when properly equipped, and accompanied by another certified diver.

2. Definitions

certification. A Certification Card ("C-Card") documenting that a student has completed all requirements of an open water diving certification course. This verification is issued by training organizations upon receipt of an instructor's written confirmation of satisfactory completion of all course requirements by the student, as documented in the student's log/training record.

certified assistant. An individual who is currently certified by a training organization to assist an instructor. By the intent of this standard, all activities of a certified assistant in open water courses shall be under the supervision of an instructor. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver-rescue techniques is required before a certified assistant may assume responsibility for any student or students during open water training dives, as defined in this document. The certified assistant shall also have passed a written examination demonstrating certified assistant-level knowledge, as required by the training organization. (See the RSTC Recreational Dive Supervisor and RSTC Assistant Scuba Instructor certification standards for details).

confined water. Any body of water that offers conditions similar to those of a swimming pool.

excursion dive. A dive without formal performance requirements made prior to completion of all open water training dives.

instructor. An individual who is currently certified and sanctioned by a training organization to teach open water scuba diving and to authorize the issuance of open water certification. In order to be sanctioned, the instructor shall meet the annual renewal requirements of the sanctioning organization. An instructor shall have completed formal training in lesson preparation, planning and delivery of lecture, pool/confined water skills and open water skills teaching presentations, in addition to completing the training requirements of a certified assistant (see definition). The instructor shall also have passed a written examination demonstrating instructor-level knowledge, as required by the training organization. (See the RSTC Recreational Scuba Instructor certification standards for details).

minimum instructional diving system. The equipment required to be worn by students while performing the skills listed in 4.9. This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low-pressure inflator, regulator, alternate air source (active scuba/air delivery system), submersible pressure gauge, weight ballast system, and exposure suit (e.g., wetsuit, drysuit, etc. if appropriate). Additional desirable (but not required) equipment includes a timing device, depth gauge, and compass/direction monitor.
open water course. A course of scuba training leading to diver certification, issued by a training organization. Successful completion of a course that meets the requirements of this standard qualifies an individual to procure air, equipment, and other diving services and to engage in recreational open water diving without supervision, except as noted in Section 3 (1).

open water scuba training dives. Supervised, open water scuba training experiences to fulfill certification requirements. Training dives shall consist of the exercises outlined in 4.9 and as required by the training organization. Each dive shall include, as minimum: (1) a briefing; (2) preparation to dive; (3) an entry; (4) at least 15 minutes at depths between 15 and 60 feet (5 and 18 metres); (5) an exit; (6) a debriefing; (7) logging the dive in student's personal log book.

out-of-air emergency alternatives. Procedures allowing a diver to ascend to the surface in the event of an out-of-air situation.

dependent procedures include: alternate air source; buddy breathing; redundant

air supply (provided by buddy).

independent procedures include: emergency ascent; redundant air supply.

supervision (pool/confined water and open water). The following levels of supervision apply as outlined in Section 5. If local regulations specify a higher level of supervision than outlined in the RSTC Standards, instructors should follow these regulations to ensure compliance with local government requirements.

direct supervision. Visual observation and evaluation of student skill performance and student diving activities by an instructor or certified assistant. Direct supervision requires personal observation and evaluation of the performance of the skills required for certification. During underwater skill performance and evaluation, direct supervision requires the student to be accompanied underwater.

indirect supervision. The overall control, general observation, evaluation, and direction of student skill performance and student diving activities. The instructor must be personally present at the training site and be prepared to come to the aid of a student.

3. Eligibility for Certification

In order to qualify for open water certification, a student shall meet the following minimum prerequisites:

(1) Age. The student shall be at least 15 years of age; there is no upper limit. Students under the minimum age who meet open water scuba performance requirements may qualify for a special certification that allows them to dive under the supervision of an adult who has, as a minimum, an open water scuba certification.

(2) **Physical Conditioning and Watermanship Evaluation.** The student shall effectively demonstrate basic watermanship ability by performing, to an instructor, the watermanship evaluation required by a training organization. This watermanship evaluation shall include either: a) continuous 200 yard (183 metre) surface distance swim and a 10 minute survival swim/float without the use of mask, fins, snorkel or of other swimming aids; b) 300 yard swim using mask, fins and snorkel, and a 10 minute survival swim/float without mask, fins, snorkel or other swimming aid. If an exposure suit is used, the wearer must be neutrally buoyant at the surface.

(3) **Medical History/Statement.** Applicants to a course shall complete the medical history/statement form required by the training organization prior to in-water activities. Applicants shall comply with all stipulations thereon before continuing in-water training. It is required that applicants with out-of-the-ordinary medical histories be approved, without conditions or restrictions, as medically fit for diving by a licensed medical practitioner prior to engaging in water activities. In no event will medical approval be accepted when the person signing the approval is the participating individual.

(4) Acknowledgment and Assumption of Risk. Applicants to a course shall be informed of the inherent risks of scuba and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation and liability release; assumption of risk; limitation of liability; safe diving practices; standards for safety; statement of understanding; etc. Parental or legal guardian signature is required on the appropriate form(s) when the applicant is a minor.

(5) **Knowledge.** When available in the student's primary language, the student shall use a dive-training manual approved by the training organization to study from during the course. The student shall demonstrate open water level knowledge of scuba diving by taking and passing an oral or written examination. Documentation of the examination shall be retained by the instructor or facility for at least 5 years. This examination shall test open water knowledge of equipment (as listed in 4.2), physics of diving (4.3), medical problems related to diving (4.4), use of dive tables and/or dive computers (4.5), dive environment (4.6), general information (4.7), pool/confined-water scuba skills (4.8), and open water scuba skills (4.9), to be presented in the course and as specified by the training organization.

(6) **Scuba Skills.** The student shall satisfactorily demonstrate, to an instructor, the scuba skills required by the training organization and as outlined in 4.8 and 4.9 covering pool/confined water and open water scuba skills, respectively. The instructor shall follow the appropriate in-water training parameters in conducting the scuba skills, as required by the training organization and outlined in Section 5.

4. Minimum Course Content

The course shall consist of the topics and scuba skills required by the training organization and as outlined in this section.

4.1 Introduction. The following information should be made available to students before or during the first class meeting.

- (1) Certification requirements (see Section 3)
- (2) Class requirements
 - (a) cost
 - (b) insurance options/requirements
 - (c) contractual agreement
- (3) Scope of course
 - (a) Content
 - (b) Limitations of eventual qualification
- (4) Equipment requirements
- (5) Course procedures

4.2 Equipment. Open water level information on the physical description, operating principles, maintenance, and use of the equipment items. The subcategories of information that are to be taught about the face mask are presented as examples of recommended course detail in covering the physical description, maintenance, and competent use of each equipment item. For similar detail regarding each of the other items, reference the training organizations' published detailed course outlines.

- 4.2.1 Face Mask
 - (1) Physical description/selection
 - (a)Fit
 - (b) Lens (including prescription/optical)
 - (c) Skirt
 - (d)Band
 - (e)Strap
 - (f) Locking device
 - (g)Equalizer
 - (h)Purge
 - (i) Shape/volume

- (2) Maintenance
 - (a) Inspection
 - (b) Cleaning
 - (c) Storage
- (3) Use
 - (d) Defogging
 - (e) Donning
 - (f) Sealing
 - (g) Clearing
 - (h) Equalizing
- 4.2.2 Fins
- 4.2.3 Snorkel
- 4.2.4 Buoyancy Control Device/Buoyancy Compensator
- 4.2.5 Exposure Suit/Exposure System/Environmental Suit
- 4.2.6 Weights and Belt/Weight System/Ballast System
- 4.2.7 Float and Flag
- 4.2.8 Cylinders/Tanks and cylinder support systems
- 4.2.9 Valves
- 4.2.10 Regulators/Air-Delivery System
- 4.2.11 Submersible pressure Gauge/Air monitor
- 4.2.12 Alternate Air Source (octopus/safe second/redundant air system/pony bottle, etc)
- 4.2.13 Timing Device (watch/time monitor)
- 4.2.14 Compass/Direction Monitor
- 4.2.15 Depth Gauge/Depth Monitor
- 4.2.16 Dive Tables and/or Dive Computers
- 4.2.17 Knife/Diver's Tool
- 4.2.18 Personal Diving Log Book
- 4.2.19 Lights
- 4.2.20 Emergency equipment
 - (a) signaling devices (acoustical and optical)

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- (b) first aid kit
- (c)oxygen kit

4.3 Physics of Diving. Open water level information on the physical principles of matter and their application to diving activities and hazards.

- (1) Sound
- (2) Light
- (3) Buoyancy
- (4) Pressure/gas laws
- (5) Temperature

4.4 Medical Problems Related to Diving. Open water level information on the causes, symptoms, prevention, and first-aid and treatment of diving medical problems.

4.4.1 Direct Effects of Pressure

(1) Descent (squeezes/barotrauma)

- (a) Ears
- (b) Sinuses
- (c) Mask
- (d) Lungs
- (e) Suit
- (f) Teeth

(2) Ascent

- (a) Gas expansion (ears, sinuses, lungs, stomach, intestines, and teeth)
- (b) Lung over pressurization/overexpansion injuries
- (c) Vertigo

4.4.2 Indirect Effects of Pressure (Physiological)

- (1) Decompression sickness
- (2) Nitrogen narcosis
- (3) Carbon dioxide excess/overexertion
- (4) Oxygen toxicity (discussion of first aid and treatment not required)

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- (5) Hyperventilation/shallow-water blackout
- (6) Contaminatedair
- 4.4.3 Other Hazards
- (1) Fatigue and exhaustion
- (2) Stress and panic
- (3) Exposure/hypothermia/overheating
- (4) Inadequate ventilation (hypoventilation)
- (5) Carotid-sinus reflex
- (6) Injuries by aquatic animals and plants
- (7) Drowning/secondary drowning
- (8) Medication, drugs and alcohol
- (9) Mental stress

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(10)Panic (11)Overconfidence

4.5 Decompression Theory and Use of Dive Tables and/or Dive Computers. Open water level information on (1) how to determine no-decompression limits for single and repetitive dives, (2) exceeding the no- decompression limits is beyond the qualifications of open water divers, (3) how to use dive tables and/or dive computers to properly plan and execute a dive and

(4) other related topics.

4.6 Dive Environment. Open water level information on the local and general conditions of the diving environment and their possible effects on the diver.

- (1) Water
 - (a) Temperature/thermocline
 - (b) Visibility
 - (c) Movements (surface action, currents, tides, and the like)
 - (d) Density (fresh and salt water)
- (2) Topography
 - (a) Bottoms
 - (b) Shorelines
- (3) Aquatic life
 - (a) Animal
 - (b) Plant
 - (4) Weather conditions
 - (5) Orientation to new diving environments
 - (6) Environmental conservation and preservation
 - (7) Hazards
 - (a) surface hazards
 - (b) Overhead environments
 - (c) Entanglement

4.7 General. Open water level information on other topics.

- (1) Dive planning
 - (a) Planning and preparation, with emphasis on the prevention of out-of-air situations and emergencies
 - (b) Emergency procedures
 - (c) Accident management/prevention
- (2) Communications, both underwater and on the surface
- (3) Diver assistance (self/buddy)
- (4) Recommended diving practices, including safety stops
- (5) Procedures for diving from boats
- (6) Proper use of personal diving logbook
- (7) Local dive regulations and protocols

4.8 Pool/Confined Water Scuba Skills. The following scuba skills shall each be required to be taught to students in pool/confined water prior to that skill being performed in the open water.

- (1) Diving system assembly and disassembly
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing snorkel and regulator
- (6) Regulator/snorkel exchanges at the surface
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask-clearing, including removal and replacement
- (10) Underwater exercises with and without mask
- (11) Buddy-system techniques
- (12) Underwater and surface buoyancy control
- (13) Underwater problem-solving (regulator recovery/retrieval, etc)
- (14) Surface-snorkel swimming with full diving system
- (15) Surface operation of the quick release/emergency function of the weight system
- (16) Underwater removal and replacement of scuba system
- (17) Underwater removal and replacement of the weight/ballast system (when wearing scuba unit with an integrated weight system, may be performed in conjunction with 4.8.16)

(18) Out-of-air emergency alternatives, including at least one dependent procedure and one independent procedure

(19) Equipment care and maintenance (at water's edge)

4.9 Open Water Scuba Skills. These open water scuba skills are to be performed while diving in the open water, wearing a minimum instructional scuba diving system.

- (1) Diving system assembly and disassembly (at water's edge)
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper Weighting
- (5) Mouthpiece clearing snorkel and regulator
- (6) Regulator/snorkel exchanges at the surface
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask-clearing
- (10) Buddy-system techniques
- (11) Underwater and surface buoyancy control
- (12) Diver assistance techniques (self/buddy)
- (13) Surface-snorkel swimming with full diving system
- (14) Removal and replacement of weight/ballast system
- (15) Removal and replacement of scuba system
- (16) Out-of-air emergency alternatives
- (17) Equipment care and maintenance (at water's edge)
- (18) Underwater navigation

5. In-water Training Parameters

It is consistent with Section 1, Scope and Purpose, that during any in-water training activities the instructor must be present.

5.1 Pool/Confined Water Training Parameters. Students shall receive their initial training of each scuba skill under the direct supervision of the instructor. Further skill development may continue under direct supervision of certified assistants and indirect supervision of the instructor. The instructor shall conduct the final evaluation to determine the satisfactory skill performance of each student.

5.2 Open-Water Training Parameters. Students to be certified shall complete at least four open water scuba training dives according to the procedures required by the training organization and as outlined in this section. All scuba skills shall be directly supervised by the instructor until satisfactory performance has been demonstrated. The exception is underwater navigation, as specified in 5.2.9.

5.2.1 The minimum equipment to be worn by an instructor while conducting open water training consists of the required and desirable equipment listed in Section 2 under the definition of "minimum instructional diving system," plus a dive knife/diver's tool (unless prohibited by law or regulation at the dive site) and an emergency-signaling device. When appropriate, the use of a surface support-station with dive flag is also encouraged.

5.2.2 The maximum number of students for in-water training is eight students per instructor. Two additional students per certified assistant may be added up to a maximum of 12 students per instructor. Although additional assistants may be used, no additional students may be added to the responsibility of the individual instructor. These ratios are considered maximum and should be reduced if environmental conditions or other factors are not optimum.

5.2.3 All dives prior to open water certification shall be conducted during daylight hours* at depths between 15 and 60 feet (5 to 18 metres). Dives shall not be conducted in any situation where direct vertical access to the surface is not possible. Aquatic plants are not considered an overhead obstruction.

*Exceptions are allowed when artificial light permanently installed at the dive site is sufficient to simulate daylight diving conditions and is approved by the training organization

5.2.4 No more than three open water scuba dives may be conducted on a given day. These dives may be a combination of required training dives and additional excursion dives.

5.2.5 During any open water scuba training dive, the instructor has the option to delegate responsibility for direct supervision to certified assistants for the purpose of escorting students during surface excursions and exits.

5.2.6 During any open water scuba training dive, while the instructor conducts a skill, certified assistants may temporarily directly supervise the remaining students.

5.2.7 Following satisfactory student performance of the skill evaluations during the second or subsequent open water scuba training dives, the instructor has the option to delegate responsibility for direct supervision to certified assistants for the purpose of escorting students during underwater tours, with indirect supervision by the instructor. Any excursion dives conducted prior to the satisfactory performance of the skill evaluations for the first training dive are to be conducted under the direct supervision of the instructor and are not to exceed a depth of 40 feet/12 metres.

5.2.8 The maximum number of students per certified assistant for the escorting of students during underwater tours is two.

5.2.9 After all other scuba skills are completed, the underwater navigation skill may be conducted on Dive #4 under indirect supervision of both the instructor and certified assistant.

All other student diving activities on Dive #4 must be under the direct supervision of either the instructor or certified assistant.

5.2.10 Dives following satisfactory completion of the four required dives, and for the purpose of expanding student experience, may be conducted with indirect supervision of an instructor (see definition in Section 2).

Aim of the course

The course is meant for a participant aiming to become a certified diver, to perform dives worldwide and to explore and experience the fascinating underwater world.

Prerequisites

- Minimum age 14 years, with minors a written letter of consent from the legal guardians (normally both parents) is required.
- Self-declaration of medical fitness (with minors the signature of the legal guardians is required). IDA recommends a valid dive medical certificate.
- Form liability / participation regulations
- The closure of dive medical insurance, especially for the liability of dive accidents (e.g. pressure chamber treatment) is strongly recommended (e.g. AQUAMED), since this kind of treatment is not covered by the health insurance.
- Education level: none -
- The participation in a CPR course is recommended (less than 12 month old)

Remarks:

When presenting an IDA-Basic-Brevet less than 15 month old, the theory and the pool units can be skipped.

When presenting an IDA-Basic-Diver brevet less than 15 month old, the theory and the pool units can be skipped.

When presenting an IDA-Scuba-Diver brevet less than 15 month old, the certified theory and pool units can be skipped.

When presenting an IDA Side-Mount* - brevets the theory can be skipped.

Theoretical Part

Curriculum:

- Explaining and selecting (e.g. fit) the correct ABC equipment.
- Explaining the correct selection and adjustment of the scuba system.
- Briefing and under water signs (UW-signs).
- Safety when diving and the Buddy system.
- Explaining the correct pressure equation method(s).
- Basics dive medicine.
- Basics dive physics.
- Basics dive technique.
- Basics for planning a dive.
- Base knowledge of emergency management.
- Environmental protection and marine life forms.
- Ways for a further education after this course.
- Written Test

Practical Part

Dive 1 in a pool / under pool like conditions

- Correct preparation of mask, snorkel, fins, buoyancy control vest (BV/ADV), scuba system and lead belt, adjusting and donning by the help of the partner.
- At the surface inflate and deflate the ADV with the inflator.
- Demonstrate the correct breathing technique and remind the student never to hold the breath at any time.
- Blow the regulator under water.
- Regaining the primary regulator from behind the shoulder under water.
- Blow the partially flooded mask under water.
- Swim and control depth and direction in complete diving equipment under water.
- Perform pressure equation for ears and mask under water.
- Read pressure gauge and signal remaining air supply under water.
- Read and signal standard UW-signs under water.
- Safe ascent.
- Depart water.

Dive 2 in a pool / under pool like conditions

- Buddy check prior to the dive.
- Correct entry into deep water.
- Blow the snorkel with the correct method; continue breathing through the snorkel without taking the face out of the water.
- At the surface, switch from snorkel to the regulator without taking the face out of the water.
- Swim at least 50m at the surface in complete scuba equipment and breathe through the snorkel.
- Perform a correct descent and show the individual steps clearly.
- Take the mask off, put it on again and blow the same free under water.
- Breathe for at least 1min without mask under water.
- Breathe for at least 45sec from the alternative air supply of a partner under water and remain stationary.
- Perform a correct ascent and show the individual steps clearly.
- Inflate the ADV with your mouth at the surface and release the air afterwards totally.
- Decide the required correct amount of lead at the surface.
- With a minimum of help release the weight system by using the fast release mechanism at the surface.
- Takeoff weight system and scuba system (if required) in the water, takeoff fins and leave the water in the best possible way.

Dive 3 in a pool / under pool like conditions

- Buddy check prior to the dive.
- Jump into the water: Two (different) jumps with complete scuba system on from a height of 1/2m and continue with a controlled descent in deep water.
- Pivoting: Gain neutral buoyancy without help by balancing on the tips of the fins.
- Hovering: Stay buoyant motionless for at least 45sec without moving arms or legs.
- Open up a lower leg cramp.
- Simulate a controlled emergency ascent by letting go the regulator and exhaling continuously breath while slowly ascending to the surface.
- Tow / push a tired diver 25m at the surface.
- Depart water.

Dive 4 in a pool / under pool like conditions

- Buddy check prior to the dive.
- Correct entry and controlled descent into deep water.
- Dive without mask for at least 15m and then put on the mask and blow it free under water.
- Perform partner air supply stationary.
- Take off the scuba system with little help at the ground and then take it back on to a fit.
- Take off the lead belt (alternative the lead pouches of the jacket or the suspender belt weight system) at the ground (or in shallow water).
- Perform a controlled ascent to the surface and perform a safety stop of 3min at 3m (if the depth conditions allow).
- Snorkel for 10min in belly position with scuba system at the surface.
- Depart the water.

Open Water Dive No.1:

Depth 6-15m/Duration at least 15min

- Briefing with motivation for the dive and assembly of scuba equipment.
- Complete and correct donning with equipment check prior to the dive.
- Buddy check prior to the dive
- Correct entry into the water.
- Buoyancy control / lead check at the surface, adjust weight in such a manner that the water level is in eye height with empty ADV when drifting under normal breath.
- Controlled descent down to a max. of 15m at a buoy rope or in reference to the bottom contour.
- First buoyancy exercises (e. g. pivoting)
- Receive and understand UW-signs and give UW-signs.
- Retrieve regulator.
- Remove mask, put it back on and blow it free in a shallow area.
- Explore the underwater world.
- Ascent to the surface.
- Departing the water.
- Equipment maintenance after the dive.
- Debriefing and entry into the logbook.

Open Water Dive No.2:

Depth 6-15m/Duration at least 15min

- Briefing with motivation for the dive and assembly of scuba equipment.
- Complete and correct donning with equipment check prior to the dive.
- Buddy check prior to the dive
- Correct entry into the water.
- Buoyancy control / lead check at the surface, adjust weight in such a manner that the water level is in eye height with empty ADV when drifting under normal breath.
- Controlled descent down to a max. of 15m at a buoy rope or in reference to the bottom contour. The single steps must be presented clearly.
- Buoyancy control exercises using the inflator (e.g. pivoting) with gaining neutral buoyancy in three different depth levels.
- Dive towards dive partner and signal air emergency situation; breathe from the alternative air supply of the partner and continue dive for another 5min. Continue exercise and shift positions (give and receive).
- Explore the underwater world, exercise buoyancy control and the fife (5) mandatory UWsigns.
- Ascent to the surface with presenting the single steps clearly. Keep contact to the dive partner and never exceed the maximum ascending speed.
- Departing the water.
- Equipment maintenance after the dive.
- Debriefing and entry into the logbook.

Open Water Dive No.3:

Depth 6-15m/Duration at least 15min

- Briefing with motivation for the dive and assembly of scuba equipment.
- Complete briefing by the group leader (add. participants)
- Complete and correct donning with equipment check prior to the dive.
- Buddy check prior to the dive
- Correct entry into the water.
- Buoyancy control / lead check at the surface, adjust weight in such a manner that the water level is in eye height with empty ADV when drifting under normal breath.

- Basics in compass navigation. Perform at the surface an approach and return course with the compass.
- Free descent with reference to 5m and then to the maximum depth.
- Pivoting, buoyancy control, inflate jacket with the mouth.
- Explore the underwater world.
- Exchange air supply stationary at a depth decided by the DI, followed by a controlled ascent with a safety stop at 5m for 3min under breathing from the alternative air supply of the dive partner (perform this exercise in the open water only once the DI has to decide who is in function supply or receive).
- At the surface assume safe positive buoyancy, every participant is breathing from the own regulator again or is using the snorkel.
- Perform a tow of a partner having an "accident" at the surface to the beach or a boat, followed by a transport to the shore or into a boat with the techniques required for the situation.
- Demonstrate the stable position sideways and the shock position and name all measures required for initiating the rescue chain.
- Equipment maintenance after the dive.
- Debriefing and entry into the logbook.

Open Water Dive No.4:

Depth 6-18m/Duration at least 15min

- Briefing with motivation for the dive and assembly of scuba equipment.
- Complete and correct donning with equipment check prior to the dive.
- Buddy check prior to the dive.
- Correct entry into the water.
- Buoyancy control / lead check at the surface, adjust weight in such a manner that the water level is in eye height with empty BCD when drifting under normal breath.
- Free descent without reference to not deeper than 18m.
- Hovering, buoyancy control without swimming or using arms or fins
- Explore the underwater world.
- Ascent to the surface with presenting the single steps clearly. Keep contact to the dive partner and never exceed the maximum ascending speed, perform a safety stop at 5m for 3min.
- Snorkel for 10min at the surface with the entire equipment on.

- Depart the water.
- Equipment maintenance after the dive.
- Debriefing and entry into the logbook.

Success control

The instructor will recall the positive impressions the participant had after every dive and answer questions about recreational diving. He / she must monitor the work on the theory modules and verify the result by the final exam.

Certification / Registration

The certification of the successful participation in this course is going to be documented by the instructor and the participant in the course sheet by signature. The registration will be done by the IDA main office with the issue of PIC and the brevet card. Additionally a sticker for a diver's pass and a certificate may be issued.

Entitlement

The successful participation in this course entitles to guided dives with scuba systems in open water down to a max. depth of 18m in company with experienced divers (at least IDA*** or equivalent) and to a participation in courses / special courses leading to the next higher level.

Enriched Air Nitrox

1. Scope and Purpose

This standard provides minimum course content requirements for instruction leading to enriched air nitrox certification in recreational diving with scuba (self-contained underwater breathing apparatus). However, these requirements should under no conditions be considered to define a level of optimum training in the use of scuba enriched air nitrox. Instructional programs that extend beyond these equirements should, in fact, be encouraged. The requirements of this standard are meant to be comprehensive, but general in nature. That is, the standard presents all the subject areas essential for enriched air nitrox certification, but it does not give a detailed listing of the skills and information encompassed by each area. For example, these minimum specifications require that an enriched air certification course must cover the operating principles, and dive planning for dives using enriched air nitrox. These items are simply listed in this standard; training organizations shall publish detailed course outlines that meet this standard, which would include specific techniques for the use of enriched air nitrox.

Although the information categories are outlined in what may appear to be a logical sequence, the outline should not be viewed as a lesson plan. That is, the order in which the information is presented in this standard, while logical as a framework for the basic requirements of this standard, does not necessarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed upon a particular subject area, or the manner in which subjects are to be taught. Rather, course outlines, lesson plans, and other training aids prepared by training organizations responsible for recreational diver training shall be used as guidelines for the sequencing and emphasis of course content requirements presented in this standard. Decisions as to sequencing and emphasis are at the discretion of the certifying instructor within the requirements of the instructor's training organizations, to be made within the context of student characteristics, and other relevant considerations.

Enriched air nitrox certification qualifies a certified diver to procure gas mixes from 21 to 40% oxygen, enriched air equipment, and other services to engage in recreational enriched air nitrox diving without supervision. It is the intent of this standard that certified enriched air nitrox divers shall have received training in the fundamentals of recreational diving from an

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instructor (see definition). A certified enriched air nitrox diver is qualified to apply the knowledge and skills outlined in this standard to plan, conduct, and log enriched air nitrox open-water, no decompression dives when properly equipped, and accompanied by another certified diver.

2. Definitions

certification. A certification card ("C-Card") documenting that a student has completed all requirements of an enriched air nitrox diving certification course. This verification is issued by training organizations upon receipt of an instructor's written confirmation of satisfactory completion of all course requirements by the student, as documented in the student's log/training record.

certified assistant. An individual who is currently certified by a training organization to assist an instructor. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver-rescue techniques is required before a certified assistant may assume responsibility for any student or students during open water training dives, as defined in this document. The certified assistant shall also have passed a written examination demonstrating certified assistantlevel knowledge, as required by the training organization. It is recommended that the certified assistant is not enriched air nitrox certified, but not required. When the certified assistant is not enriched air nitrox certified, dive planning and preparation activities are the sole responsibility of the enriched air nitrox instructor. (See the RSTC Recreational Dive Supervisor and RSTC Assistant Scuba Instructor certification standards for details).

instructor. An individual who is currently certified and sanctioned by a training organization to teach enriched air nitrox scuba diving and to authorize the issuance of enriched air certification. To be sanctioned, the instructor shall meet the annual renewal requirements of the sanctioning organization. An instructor shall have completed formal training in lesson preparation, planning and delivery of lecture, pool/confined water skills, open water; in addition to completing the training requirements of a certified assistant (see definition). The instructor shall also have passed a written examination demonstrating instructor-level knowledge, as required by the training organization. (See the RSTC Recreational Scuba Instructor certification standards for details).

minimum instructional diving system. The minimum equipment required to be worn by students while performing optional dives on enriched air nitrox. This equipment includes, as a minimum: fins, mask, snorkel, clearly marked and designated enriched air nitrox cylinder and valve, buoyancy control device with low-pressure inflator, regulator for use with enriched air, alternate air source (active scuba/air delivery system), submersible pressure gauge, weight ballast system, exposure suit (e.g., wetsuit, drysuit, etc. if appropriate), a timing device, depth gauge, and compass/direction monitor. **PO2.** Oxygen partial pressure exerted by the oxygen part of the enriched air nitrox blend. The maximum limit for enriched air nitrox training should not exceed a PO2 of 1.6.

MOD. The maximum operating depth (also called Maximum Depth) for a particular air mixture taking into consideration PO2 limit.

EAD. equivalent air depth. An adjusted depth that accounts for the reduced nitrogen in enriched air.

3. Eligibility for Certification

In order to qualify for enriched air certification, a student shall meet the following minimum prerequisites:

(1) Age. The student shall be at least 15 years of age; there is no upper limit. Students under the minimum age who meet the enriched air nitrox performance requirements may qualify for a special certification that allows them to dive under the supervision of an adult who has a minimum of an open water scuba and en-riched air nitrox certification.

(2) Dive Experience. Diver must have a minimum of an open water scuba certification to earn an enriched air diver certification. Enriched air training may be conducted in conjunction with open water diver training, but the certification cannot be issued until such time that the diver has finalized all open water scuba certification requirements

(3) Minimum Number of Logged Dives. Divers wishing to earn an enriched air diver certification must have a minimum of 4 open water scuba dives.

(4) Medical History/Statement. Applicants to a course shall complete the medical history/statement form re-quired by the training organization prior to in-water activities. Applicants shall comply with all stipulations thereon before continuing inwater training. It is required that applicants with out-of-the-ordinary medical histories be approved, without conditions or restrictions, as medically fit for diving by a licensed medical practitioner prior to engaging in water activities. In no event will medical approval be accepted when the person signing the approval is the participating individual.

(5) Acknowledgment and Assumption of Risk. Applicants to a course shall be informed of the inherent risks of scuba and enriched air nitrox and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation and liability release; assumption of risk; limita-tion of liability; safe diving practices; standards for safety; statement of understanding; etc. Parental or legal guardian signature is required on the appropriate form(s) when the applicant is a minor.

(6) Knowledge. The student shall demonstrate enriched air nitrox knowledge of scuba diving by taking and passing an oral or written examination. Documentation of the examination shall be retained by the instructor or facility for at least 5 years. This examination shall test enriched air knowledge of equipment (as listed in 4.2), physics of diving (4.3), medical problems related to

diving with enriched air (4.4), use of EANx dive tables and/or dive computers (4.5), to be presented in the course and as specified by the training organization.

(7) Enriched Air Nitrox Practical Skills Application. The practical application should consist of EANx gas analysis procedures, verifying cylinder content tags/stickers and common EANx procedures for acquiring EANx (rental checkout and fill procedures). All optional enriched air nitrox dives should include a hands on practical application session. It is the instructor's responsibility to assure the student has the ability to ana-lyze and safely plan enriched air dives prior to certification.

4. Minimum Course Content

The course shall consist of the topics and Enriched Air Nitrox training requirements the training organiza-tion and as outlined in this section.

4.1 Introduction. The following information should be made available to students before or during the first class meeting.

- (1) Certification requirements (see Section 3)
- (2) Scope of course
 - (a) Content
 - (b) Limitations of eventual qualification
- (3) Equipment requirements and considerations
- (4) Course procedures

4.2 Equipment. Enriched air nitrox level information on the physical description, operating principles, main-tenance, and use of enriched air nitrox diving equipment. Reference the training organizations' published detailed course outlines, for the subcategories of information covering the physical description, mainte-nance, competent use and preparation of each equipment item.

4.3 Physics of Diving. Enriched air level information on the physical principles of enriched air nitrox and application to diving activities.

4.4 Enriched Air Nitrox Hazards. Fundamental information on the hazards of diving with enriched air ni-trox. This instruction should include why buddy teams must limit the dive to the diver with the shallowest MOD, decompression limits, oxygen toxicity and combustibility.

4.4 Medical Problems Related to Enriched Air Nitrox Diving. Information on the causes, symptoms, pre-vention, first-aid and treatment of enriched air nitrox diving medical problems.

4.5 Use of Dive Tables and/or Dive Computers. Information on

(1) how to determine no-decompression limits for single and repetitive dives using enriched air nitrox,

(2)how to use enriched air nitrox dive tables and/or dive computers to properly plan and execute a dive

(3) how to determine PO2

- (4) how to establish equivalent air depth mix and
- (5) how to determine MOD (6) other related topics.

4.6 Obtaining Enriched Air Nitrox. Information on the local and general procedures of obtaining enriched air nitrox for diving. Student diver will be able to:

(1)Demonstrate how to use an oxygen analyzer to determine the oxygen content in an enriched air blend for two tanks.

(2)Demonstrate the procedures for obtaining an enriched air fill and renting an enriched air cylinder.

(3) Logging procedures to determine Maximum Operating Depth (MOD), PO2 and best mix.

5. In-water Training Parameters

Open-Water Training Parameters. Open water dives are encouraged but not required. Research has shown that students completing dives as part of their enriched air nitrox course are more likely to dive in the future using enriched air. If dives are conducted they should follow procedures required by the training organization and as outlined in this section. Dives may be indirectly supervised by the instructor. It is consistent with Section 1, Scope and Purpose, that during any in-water course training activities the instructor must be present.

5.1 Enriched Air Nitrox Open Water Dive Requirements. Enriched air nitrox open water scuba dives are performed while the student diver is, wearing a minimum instructional scuba diving system and should include:

- (1) Diving system assembly and disassembly
- (2) Equipment inspection (at water's edge) and analyzing tank content
- (3) Safe, no decompression dive planning
- (4) Entries and exits
- (5) Proper Weighting
- (6) Controlled descents and ascents
- (7) Underwater swimming
- (8) Buddy-system techniques
- (9) Equipment care and maintenance (at water's edge)

5.2.1 The minimum equipment to be worn by an instructor while conducting enriched air training dives consists of, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low-pressure inflator, regulator, alternate air source (active scuba/air delivery system), submersible pressure gauge, timing device, depth gauge, weight ballast system, and exposure suit (e.g., wet suit, dry suit, etc. if appropriate), a dive knife/diver's tool (unless prohibited by law

or regulation at the dive site) and an emergency-signaling device. When appropriate, the use of a surface support-station with dive flag is also encouraged.

5.2.2 All dives prior to enriched air certification shall be conducted at depths between 15 and 130 feet (5 to 40 metres), a PO2 of 1.4 ata maximum. Dives shall not be conducted in any situation where direct vertical access to the surface is not possible. Aquatic plants are not considered an overhead obstruction. Training dives may be conducted at night for divers who have night diving experience or in conjunction with a night training dive.

Nitrox (Nitrox Diver)

Aim of the course:

The applicant shall be made familiar in theory and praxis with the safe planning, preparation and execution of NITROX dives with EAN (Enriched Air Nitrox) between 22 % and 40 % oxygen content.

Prerequisites:

- Minimum age: 15 years, with minors a written consent of the legal guardian (in general both parents) is required.
- Qualification level: IDA OWD or equivalent.
- The applicant shall have a safe diving performance.
- Valid dive medical certificate.

Special regulation

The exercise dives required for becoming an IDA Nitrox diver may be included in the exercise dives to IDA OWD/ IDA* all the way to IDA ***.

The dives are optional starting with the training level IDA AOWD.

Theoretical Part

Curriculum:

- Oxygen problem (partial pressure limits, CNS)
- Physiological consequences
- CNS- and MOD-calculations for the praxis
- Nitrogen problem (Henry and EAD)
- Nitrox tables and –dive computer
- Equipment
- Legal bases
- Gas analysis and labeling of the SCUBA system
- Emergency management

Examination contents:

The applicant must answer an IDA questionnaire presented by the instructor covering the taught curriculum. The duration of the written test and the regulations for passing is on the front page of the exam.

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Curriculum:

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- Analyze the Nitrox mix
- Label the tank
- Documentation (Fill list and logbook)

Two (2) dives (optional starting at AOWD)

Depth 12-25m / duration at least 15min / ratio: 1:4

Skills / Exercises:

- Analyze the Nitrox mix, documentation
- Plan and brief a dive
- Control the dive (MOD)
- Debriefing (fill out the logbook with EAN, MOD and control the CNS)

Success control:

By evaluating the written exam and by directing and supervising the performance during the praxis exercises the diving instructor will verify whether the participant will completely meet the performance standards. He / she will discuss during and after the course the actual theoretical and practical performance with the student.

Certification / Registration:

The certification about a successful participation in this course is stated in the course control sheet by the signatures of the participant and the diving instructor. The PIC and the brevet card stating the registration with the IDA head office will manufactured and mailed by the head office.

Entry-Level Rescue Diver / Rescue Diver

1. Scope and Purpose

This standard provides minimum course content requirements for instruction leading to entry-level rescue diver certification in recreational diving with scuba (self-contained underwater breathing apparatus).

However, these requirements should under no conditions be considered to define a level of optimum rescue diver training. Instructional programs that extend beyond these requirements should, in fact, be encouraged. Some states, provinces or countries may have additional regulations for rescue diver train-ing. Instructors should be aware of requirements in their local areas and adhere to the additional proto-cols when conducting training.

The requirements of this standard are meant to be comprehensive, but general in nature. That is, the standard presents all the subject areas essential for recreational rescue diver certification, but it does not give a detailed listing of the skills and information encompassed by each area. Training organi-zations shall publish detailed course outlines that meet this standard, which would include specific techniques and recommendations for teaching. Further, this standard is general in nature, applicable to recreational diving. It is not intended to meet requirements for professional dive rescue and water safety teams. Courses taught under these general standards can, however, provide a solid foundation for additional rescue training. Rescue Divers should be encouraged to practice their rescue skills often after certification to foster skill retention and familiarity, and to take rescue refresher courses.

Although the information categories are outlined in what may appear to be a logical sequence, the outline shall not be viewed as a lesson plan. That is, the order in which the information is presented in this standard, while logical as a framework for the basic requirements of this standard, does not neces-sarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed upon a particular subject area, or the manner in which subjects are to be taught. Rather, course outlines, lesson plans, and other training aids prepared by training organizations responsible for recreational diver training shall be used as guidelines for the sequencing and emphasis of course content requirements presented in this standard. Decisions as to sequencing and emphasis are at the discretion of the certifying instructor within the requirements of the instructor's training organization, to be made within the context of environmental factors, student characteristics, and other relevant considerations.

Rescue diver training serves to help the recreational diver understand common causes of dive emergen-cies; helps the diver avoid dive accidents; and prepares the diver to give assistance to another diver in trouble. It is the intent of this standard that divers will receive rescue diver training fundamentals from an instructor (see definition).

2. Definitions

certification. A Certification Card ("C-Card") documenting that a student has completed all requirements of a rescue diving certification course. This verification is issued by training organizations upon receipt of an instructor's written confirmation of satisfactory completion of all course requirements by the student, as documented in the student's log/training record.

certified assistant. An individual who is currently certified by a training organization to assist an instruc-tor. By the intent of this standard, all activities of a certified assistant in rescue diver courses shall be under the supervision of an instructor. Certified assistants may also serve as role-playing dive accident victims in rescue training scenarios. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver rescue techniques is required before a certified assistant may assume responsibility for any student or students during open water training dives, as defined in this document. The certified assistant shall also have passed a written examination demonstrating certi-fied assistant-level knowledge, as required by the training organization. (See the RSTC Recreational Dive Supervisor and RSTC Assistant Scuba Instructor certification standards for details).

confined water. Any body of water that offers conditions similar to those of a swimming pool.

instructor. An individual who is currently certified and sanctioned by a training organization to teach open water scuba diving and to authorize the issuance of open water certification. In order to be sanctioned, the instructor shall meet the annual renewal requirements of the sanctioning organization. An instructor shall have completed formal training in lesson preparation, planning and delivery of lecture, pool/confined water skills and open water skills teaching presentations, in

addition to completing the training requirements of a certified assistant (see definition). The instructor shall also have passed a written examination demonstrating instructor-level knowledge, as required by the train-ing organization. (See the RSTC Recreational Scuba Instructor certification standards for details).

minimum instructional diving system. The equipment required to be worn by students while perform-ing the skills listed in 4.8. This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low-pressure inflator, regulator, alternate air source (active scuba/air delivery system), submersible pressure gauge, timing device, depth gauge, weight ballast system, and exposure suit (e.g., wetsuit, dry suit, etc. if appropriate). A compass/direction monitor is desirable, but not required.

rescue diver course. A course of scuba training leading to rescue diver certification, issued by a training organization. Successful completion of a course that meets the requirements of this standard prepare an individual to recognize common causes of dive emergencies; to lend assistance to another diver in need; to act appropriately in a diving emergency; and to avoid diving accidents.

open water rescue training. These are supervised, open water scuba training experiences to fulfill certifi-cation requirements. Training shall consist of the exercises outlined in 4.8 and as required by the training organization. Each dive shall include, as minimum: (1) a briefing; (2) preparation to dive; (3) an entry; (4) at least 15 minutes at depths not to exceed 60 feet (18 metres); (5) an exit; (6) a debriefing; (7) logging the dive in student's personal logbook .

supervision (open water). The levels of supervision apply as outlined in Section 5. If local regulations specify a higher level of supervision than outlined in the RSTC Standards, instructors should follow these regulations to ensure compliance with local government requirements.

3. Eligibility for Certification

To qualify for rescue diver certification, a student shall meet the following minimum prerequisites:

3.1 Age. The student shall be at least 15 years of age; there is no upper limit. Students under the minimum age who can meet performance requirements may qualify for special certification, as speci-fied by the training organization's standards.

3.2 Open water diver certification. The student shall have proof of open water diver certification as prerequisite to the course.

3.3 Emergency care training.

3.3.1 CPR/first aid. The student shall have proof of CPR and first aid training prior to becoming certified as a rescue diver. Preferably, CPR and first aid training occurs before or in conjunction with rescue diver training.

3.3.2 Emergency oxygen use. The student shall be trained in the practical use of emergency oxygen use during or prior to the rescue diver course when not prohibited by local law.

3.3.3 Automated External Defibrillator (AED). It's recommended that the student have AED training during or prior to the rescue diver course.

3.4 Medical History/Statement. Applicants to a course shall complete the medical history/statement form required by the training organization prior to in-water activities. Applicants shall comply with all stipulations thereon before continuing in-water training. It is required that applicants with out-of-the-ordinary medical histories be approved, without conditions or restrictions, as medically fit for diving by a licensed medical practitioner prior to engaging in water activities. In no event will medical approval be accepted when the person signing the approval is the participating individual.

3.5 Acknowledgment and Assumption of Risk. Applicants to a course shall be informed of the inherent risks of scuba and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation and liability release; assumption of risk; limitation of liability; safe diving practices; standards for safety; statement of understanding; etc.

3.6 Knowledge. When available in the student's primary language, the student shall use a rescue diver training manual approved by the training organization to study from during the course. The student shall demonstrate rescue diver level knowledge of scuba diving by taking

and passing an examination. Documentation of the examination shall be retained by the instructor or facility for each student for a minimum of five years, or longer if stipulated by local legal requirements. This examination shall test student knowledge of common causes of diver stress and dive emergencies (as listed in 4.2), identify-ing a diver in need (4.3), dive rescue procedures and injury treatment (4.4), first aid supplies and dive rescue equipment, (4.5), managing a dive emergency (4.6), rescuer health and safety (4.7), and in-wa-ter rescue skills (4.8), to be presented in the course and as specified by the training organization. The student shall also prepare an emergency assistance plan (4.6.5), including steps of emergency management for a dive site as specified by the instructor and the training organization.

3.7 Rescue Skills. The student shall satisfactorily demonstrate to an instructor the rescue skills required by the training organization and as outlined in 4.8. The instructor shall follow the appropriate in-water training parameters in conducting the rescue skills, as required by the training organization and outlined in Section 5.

4. Minimum Course Content

The course shall consist of the topics and rescue skills required by the training organization and as outlined in this section.

4.1 Introduction. The following information should be made available to students before or during the first class meeting.

(1) Certification requirements (see Section 3)

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(2) Class
requirements (a)
Cost
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- (b) Insurance options/requirements
- (c) Contractual agreement
- (3) Scope of course

(a)Content

- (b) Limitations of eventual qualification
- (4) Equipment requirements
- (5) Course procedures

4.2 Common causes of stress and dive emergencies

4.2.1 Equipment related problems (Including overweighting and when it's appropriate to ditch weights)

4.2.2. Temperature Related Problems (reference first aid training)

- (1) Heat exhaustion
- (2) Heat Stroke
- (3) Shock
- (4) Hypothermia (including rewarming

procedures) 4.2.3 Overexertion

4.2.4 Panic

4.2.5 Pressure-related injuries

- (1) Decompression sickness
- (2) Arterial gas embolism
- (3) Other lung overexpansion injuries

4.2.6 Near drowning,

drowning 4.2.7 Aquatic life

4.2.8 Environmental conditions

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4.3 Identifying a dive emergency or diver in need (both on the surface and underwater)

- 4.3.1 Recognizing signs of stress
 - (1) Physical stress
 - (2) Psychological stress
 - (3) Perceptual narrowing
 - 4.3.2 Recognizing characteristics of a tired diver
 - 4.3.3 Recognizing characteristics of a panicked

diver

4.4 Dive rescue procedures and treatment of injuries 4.4.1 Self rescue techniques

4.4.2 First Aid for common Aquatic Life injuries 4.4.3 Nonswimming assists/rescues

4.4.4 Critical Incident Stress

4.4.5 First aid for pressure-related injuries

- (1) Decompression sickness
- (2) Arterial gas embolism
- (3) Other lung overexpansion injuries
- 4.4.6 Near-drowning, drowning and treatment
- 4.4.7 Assisting a responsive diver at the surface and underwater
- 4.4.8 Surfacing an unresponsive diver
- 4.4.9 Egress with a responsive and unresponsive diver
- 4.4.10 Equipment removal considerations
- 4.4.11 In-water rescue breathing techniques for the nonbreathing diver
- 4.4.12 Missing Diver procedures and considerations, including search patterns.

4.5 First aid supplies and dive rescue equipment. The value and use of each of the following are covered in the rescue diver knowledge development and in practical application as required by the training organization.

- 4.5.1 First Aid kit
- 4.5.2 Pocket mask/barrier devices
- 4.5.3 Emergency Oxygen (see 4.8-19).
 - (1) Benefits to the diver
 - (2) Various oxygen delivery systems
 - (3) Legality and oxygen use risks
- 4.5.4 Automated External Defibrillator.

4.5.5. Use of visual and audible signaling devices. Student or instructor demonstrates purpose and

use of both visual and audible signaling devices.

4.5.6 Special Equipment
4.6 Managing a dive emergency

- 4.6.1 Site safety assessment
- 4.6.2 Scene management (including rescue team management)
- 4.6.3 Neurological exam procedures
- 4.6.4 Evacuation and professional treatment
 - (1) Emergency Medical Services
 - (2) Hyperbaric chamber--value to the victim of a dive accident
- 4.6.5 Students must prepare an emergency assistance plan, including steps of emergency

management

- 4.6.6 Elements of a written report of an incident
 - (1) Fact recording
- 4.6.7 Equipment retention following an incident

4.7 Rescuer health and safety

- 4.7.1 Risks to the rescuer
- 4.7.2 Physical conditioning
- 4.7.3 The need for keeping your rescue and emergency care skills up-to-date.

4.8 Open Water Scuba Rescue Skills. These open water scuba skills are to be performed while diving in the open water, wearing a minimum instructional scuba diving system. Each student will demonstrate an appropriate procedure for:

- 4.8.1 Cramp release
- 4.8.2 Establishing buoyancy at the surface (self and for another diver)
- 4.8.3 Airway control
- 4.8.4 Supplying air to a diver simulating out-of-air -- Alternate air source use
- 4.8.5 Overcoming vertigo
- 4.8.6 Responding correctly to a tired diver at the surface and underwater
- 4.8.7 Responding correctly to a panicked diver at the surface and underwater
- 4.8.8 Non-swimming assists
- 4.8.9 Water entry when responding to an emergency
- 4.8.10 Swimming assists
- 4.8.11 At least two methods of diver tows
- 4.8.12 Egresses (both responsive and unresponsive diver)
- 4.8.13 Responding to a diver simulating overexertion
- 4.8.14 Conducting underwater Search patterns
- 4.8.15 Equipment removal techniques
- 4.8.16 Surfacing an unresponsive diver (see 5.2.4).
- 4.8.17 In-water rescue techniques for the nonbreathing diver
- 4.8.18 Administering emergency oxygen (where not prohibited by local law)
- 4.8.19 Various scenario practices

5. In-water Training Parameters

It is consistent with Section 1, Scope and Purpose, that during any in-water training activities the instructor must be present.

5.1 Pool/Confined Water Training Parameters. Students may receive their initial training of each scuba rescue skill in the pool/confined water before demonstrating them in open water.

5.2 Open-Water Training Parameters. For certification, students shall satisfactorily perform and com-plete skills as specified in 4.8 in the open water according to the procedures required by the training organi-zation and as outlined in this section.

5.2.1 The use of a surface support-station with dive flag is encouraged when conducting underwater skills. Visually marking the surface skills area with surface markers/flags is also recommended or re-quired when local law dictates.

5.2.2 The maximum number of students for open-water training is eight students per instructor. Four additional students for each certified assistant may be added. The scuba instructor shall limit the number of students per scuba instructor where environmental conditions are less than ideal, for example where underwater visibility is poor or there is significant water movement. The scuba instructor may also use additional aids to improve safety such as ascent lines, surface support stations or safety scuba divers.

5.2.3 During some surface rescue skill portions of rescue training in open water, students and/or instructors will not be wearing a complete minimum instructional scuba diving system.

5.2.4 All dives shall be conducted during daylight hours* at depths no greater than 60 feet (18 metres). Surfacing an unresponsive diver (4.8.16) shall be conducted at depths no greater than 30 feet (9 metres). Dives shall not be conducted in any situation where direct vertical access to the surface is not possible. Aquatic plants are not considered an overhead obstruction.

*Exceptions are allowed when artificial light permanently installed at the dive site is sufficient to simulate daylight diving conditions and is approved by the training organization.

5.2.4 All dives shall be conducted during daylight hours* at depths no greater than 60 feet (18 metres). Surfacing an unresponsive diver (4.8.16) shall be conducted at depths no greater than 30 feet (9 metres). Dives shall not be conducted in any situation where direct vertical access to the surface is not possible. Aquatic plants are not considered an overhead obstruction.

*Exceptions are allowed when artificial light permanently installed at the dive site is sufficient to simulate daylight diving conditions and is approved by the training organization.

Aim of this course

The course participant shall learn in this course the techniques and skills required to prevent a diving accident. If a diving accident occurs he / she shall be able to apply the required and correct measures. Upon completion of this course he / she shall have the awareness for the prevention of diving accidents and perform dives in a way to eliminate accident risks and situations that may lead into such for him-/herself and the divers in company. He / she shall be able to evaluate accident situation correctly, apply rescue and transport techniques in the water and at the shore, first-aid-measures and reanimation techniques, the effectively deploy rescue- and signal aids and know and initiate the rescue chain.

Prerequisites:

- Minimum age: 15 years, with minors consent of the legal guardians (normally both parents) is required.
- Education level: IDA OWD or equivalent
- Number of obligatory dives: 20 dives
- A medical fit self-declaration (with minors the signature of the legal guardian) is required. IDA recommends a valid dive medical examination.

Theoretical Part

Curriculum:

- Avoiding of accidents by eliminating of risk situations
- Stress sensors and panic
- Realizing and evaluating an accident situation
- Rescue- and transport techniques
- First-Aid-Measures
- Reanimation (CPR)
- Emergency case, AED
- Rescue- and signal material
- Rescue chain
- Dive- and accident protocol

Practical Part

Stations (DSR-Skill-Circuit – Exercising the right techniques)

- Diver in panic at the surface
- Aiding a diver at the surface being "exhausted, insured, unconscious"
- Aiding a diver below the surface being "exhausted, insured, unconscious"
- Pull-, lifting- and carrying techniques
- Rescue and transport of a diver to the shore after having an "accident"
- Rescue and transport of a diver into a rigid hull boat after having an "accident"
- Rescue and transport of a diver into a rubber dinghy after having an "accident"
- Diagnosis of illness symptoms
- First-Aid-Measures, reanimation, one-helper-method, two-helper-method
- Deploying of a first-aid-case / AEDs
- Oxygen donation / bagging ventilation
- Initiating the rescue chain

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During two dives with occurring "mishaps" a fast and correct reaction with the application of previously learned techniques shall complete the course. After every dive with a "mishap" an accident protocol must be produced.

Success control

During an intense debriefing the instructor will verify whether the participant has achieved the aims of the course.

Certification / Registration

The proof of successful participation is completed by the both signatures of the participant and the instructor on the course acceptance sheet. The PIC and the registration will be completed by the IDA main office with the issue (mailed) of a brevet card. In addition may the instructor issue a sticker for the divers 'pass and present a diploma.

Recreational Dive Supervisor / Diver * and Diver ******

1. Scope and Purpose

This standard provides minimum content requirements for recreational dive supervisor (Divemaster, Dive Control Specialist, Dive Coordinator, etc.) training. However, these requirements should under no conditions be considered to define a level of optimum training of a recreational dive supervisor. Instruc-tional programs that extend beyond these requirements should, in fact, be encouraged. The requirements of these standards are meant to be comprehensive, but general in nature. That is, the standards present all of the subject areas essential for minimum dive supervisor training, but it does not give a detailed listing of the skills and information encompassed by each area. These items are simply listed in the standards; training organizations shall publish detailed course outlines that meet these standards, which would include specific techniques.

Although the information categories are outlined in what may appear to be a logical sequence, the out-line should not be reviewed as a lesson plan. That is, the order in which the information is presented in the standards, while logical as a framework for the basic requirements of this standard, does not neces-sarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed upon a particular subject area, or the manner in which subjects are to be taught. Rather, course outlines, lesson plans and other training aids prepared by training organizations responsible for training recreational scuba dive supervisor shall be used as guidelines for the sequencing and emphasis of course content requirements presented in these standards. Decisions as to sequencing and emphasis are at the discretion of the certifying training organization, to be made within the context of environmental factors, instructor characteristics, and other relevant considerations.

The intent of these standards is to provide individuals with sanctioned training as dive supervisors. The standards cover the supervision of recreational divers and assistance in the training of such divers. A certified dive supervisor is qualified to apply the knowledge and skills outlined in these standards to assist certified instructors in conducting educational and scuba skills training of recreational scuba divers, and to conduct supervised diving activities as outlined by his/her respective training organization.

2. Definitions

Certification. Document indicating that the bearer has completed all requirements of a scuba Dive Supervisor Certification Course. This verification is issued by a training organization upon the confirmation of the satisfactory completion of all course requirements, as documented in the bearer's individual log/training record and the training organization's equivalent documentation.

Current. Certification or document issued which has not reached its expiration date prior to the issuing dive supervisor certification.

Diver Rescue. Training offered by a training organization that includes diving-specific classes in emergency planning and accident management, along with open water training in the areas of selfaid, self-assist, buddy-aid, buddy-assist, locating, surfacing and egress of an unresponsive diver,

diver emergency planning and accident management procedures.

Dive Supervisor. An individual who is currently qualified and sanctioned by a training

organization to assist an instructor in teaching recreational scuba divers, and to conduct supervised diving activities as outlined by his/her respective training organization. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver-rescue techniques is required. The dive supervisor shall also have passed a written examination demonstrating dive supervisorlevel knowledge, as required by the training organization. To be sanctioned, the dive supervisor must meet the annual renewal requirements of the training organization.

Dive Supervisor Course. The training course of dive supervisor training leading to dive

supervisor certification issued by a training organization. Successful completion of a course which meets or exceeds this standard qualifies an individual to apply the knowledge and skills outlined in these standards to assist a certified scuba instructor in conducting educational and scuba skills training and to supervise diving activities as outlined by his/her respective training organization.

Minimum Dive Supervisor Diving System. This equipment is required to be worn by candidates while performing the skills listed in 5.4, 5.5 and 5.6. This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low

pressure inflator, backpack, regulator, alternate air source (active scuba/air delivery system), submersible pressure gauge, weight ballast system and exposure suit (if appropriate), timing device, depth gauge, knife/diver's tool (unless prohibited by law or regulation at the dive site), dive tables, compass/direction monitor and emergency signaling device.

Out-of-Air Emergency Alternatives. Procedures allowing a diver to ascend to the surface in the event of an out-of-air situation. Dependent procedures include: alternate air source; buddy

breathing; redundant air supply (provided by a buddy). Independent procedures include: emergency ascent; redundant air supply.

3. Prerequisites

In order to qualify for enrollment in a dive supervisor course an individual shall meet the following minimum prerequisites.

- (1) Age. The individual shall be at least eighteen (18) years of age; there is no upper limit.
- (2) Dive Experience. An evaluation conducted by the instructor of the candidate's dive experience that includes, but is not limited to:
 - 1.20 logged dives

2. Additional experience (e.g., advanced, night, deep, navigation, and search and recovery) since entry-level certification, as documented in the candidate's individual log book/training record or equivalent documentation.

- (3) Minimum Candidate Diving System. The candidate shall possess (the minimum dive supervisor candidate diving system.
- (4) Minimum Candidate Certification. The candidate shall have completed the requirements and be certified beyond open water diver, at an advanced diver level, as required by the training organization.

4. Eligilibity for Certification

(1) Medical Examination. The candidate shall have, within the past year, a medical examination and ap-proval for diving, without conditions or restrictions, by a licensed medical practitioner prior to engaging in water activities. In no event shall medical approval be accepted, wherein the medical practitioner signing the approval is the participating candidate.

(2) Physical Conditioning and Watermanship Evaluation. The candidate shall effectively demonstrate basic watermanship ability by performing to a certified instructor the watermanship evaluation required by the training organization. This watermanship evaluation shall include a 300 yard (275 metres) or greater surface swim without the use of mask, fins, or snorkel, or other swimming aids (exception permitted for eye protection, e.g. swim goggles).

(3) Acknowledgment and Assumption of Risk. Candidates shall be informed of the inherent risks of scuba and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation and liability release; assumption of risk; limitation of liability; safe diving practices; standards for safety; statement of understanding; etc.

(4) Knowledge. The candidate shall demonstrate dive supervisor-level knowledge of scuba diving by taking and passing a written examination. Documentation of the examination shall be permanently retained by the training organization. This examination shall test dive supervisor knowledge of equipment, physics of diving, physiology of diving, medical problems related to

diving, decompression theory, use of the dive tables, dive computers, diving environment, group control, accident management, dive planning, dive supervising and training standards as specified by the training organization and as outlined in 5.2 and 5.3.

(5) Scuba Skills. The candidate shall satisfactorily demonstrate, to a certified instructor dive supervisor-level scuba skills required by the training organization, and as outlined in Section 5.4, 5.5 and 5.6, covering pool/confined water and open water scuba skills, respectively.

(6) CPR. At the time of certification, the candidate shall complete and have current, training in CPR as required by the trainingorgosation. CPR may be taught during the dive supervisor course, but may not be counted towards the 40 total training hours.

(7) First Aid. At the time of certification, the candidate shall complete and have current, training in First Aid as required by the training organization. First Aid may be taught during the dive supervisor course, but may not be counted towards the 40 total training hours.

(8) Diver Rescue. The candidate shall complete training in diver rescue skills as required by the training organization and outlined in 5.6. The candidate shall also satisfactorily demonstrate, to a certified instructor, at least one complete rescue as required by the training organization. Diver rescue may be taught during the dive supervisor course and may be counted toward the 40 total training hours.

(9) Practical Application. The candidate shall complete training in planning, management, and control of diving activities and shall satisfactorily demonstrate to a certified instructor the ability to solve in-water and out-of-the-water diver problems as required by the training organizations.

(10) Training Hours. The candidate shall complete at least forty (40) hours of specialized training/evaluation. A minimum of thirty (30) hours of this training/evaluation is to occur under the supervision of a certi-fied instructor and include the topics outlined in Section 5.2. The remaining hours are to include, but are not limited to, the training outlined in 5.3, 5.4 and 5.6.

(11) Dive Experience. At the time of certification, the candidate shall have at least 40 verifiable open water logged dives.

5. Minimum course content

The course shall consist of the topics and scuba skills required by the training organization and as outlined in this section.

5.1 Introductory Information. The following information should be made available to candidates before, or during the first class meeting.

(1) Certification requirements (see section 3 and 4)

- (2) Scope of course
- (a) Content
- (b)Limitations of eventual qualification
- (3) Equipment requirements
- (4) Course procedures

5.2 Course Topics. The candidate shall complete training under the supervision of a certified instructor. Training is to include the topics as required by the training organization and as outlined in this section.

(1)Preparation, planning, and control in dive management and diving activities

(2)Pool/confined water and open water procedures

(3)Pool/confined water and open water problem solving

(4)Delivery of at least five (5) appropriate dive management or diving activities

(5)The training organization's training standards

(6)The training organizations' requirements for dive supervisor certification

(7)Professional and ethical responsibility of a recreational dive supervisor

(8) Dive supervisor-level knowledge of equipment, physics of diving,

physiology of diving, medical problems related to diving, decompression theory, use of dive tables, dive computers and dive environment.

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5.3 Knowledge Development. The candidate shall demonstrate to a certified instructor planning and control in dive management, and the knowledge required for certification from the topics outlined in this section as required by the training organization.

- (1) Equipment
- (2) Physics of diving
- (3) Medical problems related to diving
- (4) Use of diving tables and dive computers
- (5) Diving environment
- (6) Dive planning
- (a) Planning and preparation, with emphasis on the prevention of out-of-air situations and emergencies
- (b) Emergency procedures
- (c) Accident management/prevention
- (9) Communications, both underwater and on the surface
- (10) Diver assistance
- (11) Recommended safe diving practices
- (12) Boat diving procedures
- (13) Night diving procedures

5.4 Pool/Confined Water Scuba Skills. The candidate shall demonstrate to a certified instructor personal scuba skills as outlined in this section and as required by the training organization. In addition the candidate shall demonstrate preparation and planning (including briefing and

debriefing); group control and supervision; problem recognition and solving for at least one pool/confined water diving activity from the topics outlined in this section, and as required by the training organization.

- (1) Diving system assembly and disassembly (at the water's edge)
- (2) Equipment inspection (at the water's edge)
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing--snorkel and regulator
- (6) Regulator retrieval
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask clearing, including removal and replacement
- (10) Underwater exercises--with and without mask
- (11) Buddy system techniques
- (12) Underwater and surface buoyancy control
- (13) Underwater problem-solving (regulator recovery/retrieval, etc.)
- (14) Surface-snorkel swimming with full diving system

(15) Surface operation of the quick release/emergency functions of the weight system
Underwater removal and replacement of the weight/ballast system (when wearing a scuba unit with an integrated weight system, may be performed in conjunction with 5.4.16)
(16) Removal and replacement of scuba system

- (17) Out-of-air emergency alternatives
- (18) Equipment care and maintenance (at the water's edge)

5.5 Open Water Scuba Skills. The candidate shall demonstrate in open water, to a certified instructor, preparation and planning (including briefing and debriefing), group control and supervision, problem solving for at least three (3) open water diving activities, from the topics outlined in this section, one of which is to include problem recognition and solving as required by the training organization.

- (1) Diving system assembly and disassembly (at water's edge)
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing--snorkel and regulator
- (6) Regulator/snorkel exchanges at the surface
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask-clearing
- (10) Buddy-system techniques
- $(11) \label{eq:university} Underwater and surface buoyancy control$
- (12) Diver assistance techniques (self/buddy/group)
- (13) Surface-snorkel swimming with full diving system
- (14) Underwater Problem-solving (regulator recovery/retrieval, etc.)
- (15) Underwater removal and replacement of the weight/ballast system (when wearing

a scuba unit with an integrated weight system, may be performed in conjunction with 5.5.16)

- (16) Removal and replacement of scuba system
- (17) Out-of-air emergency alternatives
- (18) Equipment care and maintenance (at the water's edge)
- (19) Underwater navigation

5.6 Rescue. The candidate shall demonstrate in open water, to a certified instructor, at least one complete rescue as required by the training organization.

Recreational Assistant Instructor

1. Scope and Purpose

The Assistant Scuba Instructor Course provides individuals who have met the dive supervisor requirements with additional training as instructional assistants. Using the background established during dive supervisor training, the Assistant Scuba Instructor course builds on this foundation. The assistant scuba instructor candidate will learn through practical application (internship: hands on experience working with actual candidates) or through practical training exercises (designed to role play actual training circumstances) while supervised by the certified scuba instructor.

This standard provides minimum content requirements for recreational assistant scuba instructor training. These requirements do not define an optimum level of training for a recreational assistant scuba instructor. Instructional programs that exceed these requirements are encouraged. These standards are meant to be comprehensive, but general in nature. That is, the standards present all of the subject areas essential for minimum assistant scuba instructor training, but they do not give a detailed listing of the skills and information encompassed by each area. These items are simply listed in the standards; training organizations shall publish detailed course outlines that meet these standards, which would include specific techniques.

Although the information categories are outlined in what may appear to be a logical sequence, the outline should not be reviewed as a lesson plan. That is, the order in which the information is presented in the standards, while logical as a framework for the basic requirements of this standard, does not necessarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed on a particular subject area, or the manner in which subjects are to be taught. Rather, course outlines, lesson plans and other training aids prepared by training organizations responsible for training recreational scuba assistant scuba instructor shall be used as guidelines for the sequencing and emphasis of course content requirements presented in these standards. Sequencing and emphasis decisions are at the discretion of the certifying training organization, and are to be made within the context of environmental factors, instructor characteristics, and other relevant considerations.

The intent of these standards is to provide individuals with sanctioned training as assistant scuba instructors. The standards cover the supervision, training, and assistance in the training of recreational divers. A certified assistant scuba instructor is qualified to apply the knowledge and skills outlined in these standards to assist certified instructors in conducting academic and scuba skills training of recreational scuba divers, to conduct limited or specialized training and issue certification for this training as outlined by their respective training organization, and to conduct supervised diving activities. The assistant scuba instructor may perform the duties as outlined by his/her respective training organization.

2. Definitions

Certification. Document indicating that the bearer has completed all requirements of an assistant scuba instructor certification course. This verification is issued by a training organization upon the confirmation of the satisfactory completion of all course requirements, as documented in the bearer's individual log/training record and the training organization's equivalent documentation.

Current. Certification or document issued which has not reached its expiration date prior to the issuing assistant scuba instructor certification.

Diver Rescue. Training offered by a training organization that includes diving-specific classes in emergency planning and accident management, along with open water training in the areas of self aid, self assist, buddy aid, buddy assist, locating, surfacing and egress of an unresponsive diver, diver emergency planning and accident management procedures.

Assistant Scuba Instructor. An individual who is currently qualified and sanctioned by a training organization to assist an instructor in teaching recreational scuba divers, to provide limited training in the use of scuba under the direction of a certified scuba instructor, independently provide limited training to certified divers as defined by his/her agency, and to conduct supervised diving activities as outlined by his/her respective training organization. To be sanctioned, the assistant scuba instructor must meet the annual renewal requirements of the training organization.

Assistant Scuba Instructor Course. The training course leading to assistant scuba instructor

certification issued by a training organization. Successful completion of a course which meets or exceeds this standard qualifies an individual to apply the knowledge and skills outlined in these standards to supervise diving activities, assist a certified scuba instructor in conducting academic and scuba skills training and to independently provide limited training to certified divers as outlined by his/her respective training organization.

Minimum Assistant Scuba Instructor Diving System. This equipment is required to be worn by candidates while performing the skills listed in 5.4 and 5.5. This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low pressure inflator, backpack, regulator, alternate air source (active scuba/air delivery system), submersible pressure gauge, weight ballast system and exposure suit (if appropriate), timing device, depth gauge, knife/diver's tool (unless prohibited by law or regulation at the dive site), dive tables, compass/direction monitor and emergency signaling device.

Limited Presentation. A supervised teaching internship or practical training exercise designed to give the candidate teaching experience. Teaching assignments are to be non-complex topics; simple skills for pool/confined water and open water. Limited presentations are conducted under the direct supervision of the instructor. The instructor is to correct any errors that may be made by the candidate by summarizing the candidate's presentation for the students and should privately provide feedback on candidate performance and offer suggestions for improvement.

Direct supervision. Visual observation and evaluation of candidate skill performance and candidate diving activities by an instructor. Direct supervision requires personal observation and evaluation of the performance of the skills required for certification. During underwater skill performance and evaluation, direct supervision requires the candidate to be accompanied underwater.

Out-Of-Air Emergency Alternatives. Procedures allowing a diver to ascend to the surface in the event of an out-of-air situation.

dependent procedures include: alternate air source; buddy breathing; redundant air supply

(provided by a buddy).

independent procedures include: emergency ascent; redundant air supply.

3. Prerequisites

In order to enroll in an assistant scuba instructor course an individual shall meet the following minimum Prerequisites.

(1) Age. The individual shall be at least eighteen (18) years of age; there is no upper limit.

(2) Dive Experience. An evaluation conducted by the instructor of the candidate's dive experience that includes, but is not limited to:

1.40 logged dives.

2. Additional experience (e.g., advanced, night, deep, navigation, and search and recovery) since entry-level certification, as documented in the candidate's individual log

book/training record or equivalent documentation.

(3) Minimum Candidate Diving System. The candidate shall possess (the minimum assistant scuba instructor candidate diving system).

(4) Minimum Candidate Certification. The candidate shall have completed the requirements and be certified at the dive supervisor level, or must receive the required dive supervisor training during the assistant scuba instructor course, as required by the training organization.

4. Eligilibity for Certification

(1) **Medical Examination.** The candidate shall have, within the past year, a medical examination and approval for diving, without conditions or restrictions, by a licensed medical practitioner prior to engaging in water activities. In no event shall medical approval be accepted, wherein the medical practitioner signing the approval is the participating candidate.

(2) Acknowledgment and Assumption of Risk. Candidates shall be informed of the inherent risks of scuba and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation and liability release; assumption of risk; limitation of liability; safe diving practices; standards for safety; statement of understanding; etc.

(3) **Knowledge and Practical Application.** The individual shall assist a certified instructor with all academic, pool/confined water and open water sessions of at least one (1) complete open water diver scuba diving course and/or complete practical training exercises that simulates classroom, pool/confined water and open water challenges.

(4) **Teaching Presentations.** The individual shall present at least on (1) limited presentation each for academic, pool/confined water and open water in at least one (1) complete open water diver scuba diving course (three (3) presentation total). Teaching presentations done as part of the dive

supervisor program may not be counted.

(5)**CPR.** At the time of certification, the candidate shall complete and have current, training in CPR as required by the training organization. CPR may be taught during the assistant scuba instructor

course, but may not be counted towards the 70 total training hours.

(6) **First Aid.** At the time of certification, the candidate shall complete and have current, training in First Aid as required by the training organization. First Aid may be taught during the assistant scuba instructor course, but may not be counted towards the 70 total training hours.

(7)**Diver Rescue**. The candidate shall complete training in diver rescue skills as required by the training organization.

(8)**Training Hours.** The candidate shall complete at least seventy (70) hours of involvement/training/ evaluation which may include no more than thirty (30) hours of dive supervisor training.

(9)**Dive Experience.** At the time of certification, the candidate shall have at least 60 verifiable open water logged dives.

(10) **Records.** Appropriate assistant scuba instructor records are to be retained by the training organization.

5. Minimum course content

The course shall consist of the topics and scuba skills required by the training organization and as outlined in this section.

5.1 Introductory Information. The following information should be made available to candidates before or during the first class meeting.

- (1) Certification requirements (see section 3 and 4)
- (2) Scope of course
 - (a) Content
 - (b) Limitations of eventual qualification
- (3) Equipment requirements
- (4) Course procedures

5.2 Course Topics. The candidate shall complete training under the supervision of a certified instructor. Training is to include the topics as required by the training organization and as outlined in this section.

- (1)Preparation, planning, and control in dive management and diving activities
- (2)Pool/confined water and open water procedures
- (3) Practical experience in assisting with the training of open water divers
- (4) Experience teaching limited segments
- (5)Pool/confined water and open water problem solving
- (6) The organization's training standards
- (7) The organizations' requirements for assistant scuba instructor certification
- (8) Professional and ethical responsibility of a recreational assistant scuba instructor
- (9)Indication of knowledge as outlined in section 4.

5.3 Academic Session. The candidate shall complete academic training as required by the training organization and as outlined in this section. This training is to occur during the academic portions of one (1) complete open water diver scuba course or through simulated classroom practical exercises.

- (1) Observing/Supervising
- (2) Assisting
- (3) Teaching of one (1) limited presentation -- lecture

5.4 Pool/Confined Water Scuba Skills. The candidate shall complete pool/confined water training as required by the training organization and as outlined in this section. This training is to occur during the pool/confined water portions of one (1) complete open water diver scuba diving course or through simulated practical training exercises.

- (1) Observing/Supervising
- (2) Assisting
- (3) Teaching of one (1) limited presentation pool/confined water

5.5 Open Water Sessions. The candidate shall complete open water training as required by the

training organization and as outlined in this section. This training is to occur during the open water portions of one (1) complete open water diver scuba course or through simulated practical training exercises.

- (1) Observing/Supervising
- (2) Assisting
- (3) Teaching of one (1) limited presentation open water

Recreational Scuba Instructor / IDA Instructor *

1. Scope and Purpose

This standard provides minimum course content requirements for recreational scuba instructor training. However, these requirements should under no conditions be considered to define a level of optimum training of a recreational scuba instructor. Instructional programs that extend beyond these requirements should, in fact, be encouraged. Some states, provinces or countries may have additional regulations for entry-level scuba training. Instructors should be aware of requirements in their local areas and adhere to the additional protocols when conducting training.

The requirements of this standard are meant to be comprehensive, but general in nature. That is, the standard presents all the subject areas essential for minimum instructor training, but it does not give a detailed listing of the skills and information encompassed by each area. These items are simply listed in this standard; training organizations shall publish detailed course outlines that meet this standard, which would include specific techniques.

Although the information categories are outlined in what may appear to be a logical sequence, the outline shall not be viewed as a lesson plan. That is, the order in which the information is presented in this standard, while logical as a framework for the basic requirements of this standard, does not necessarily define the sequence of a class lesson plan. Similarly, the requirements presented in this standard do not indicate the emphasis that should be placed upon a particular subject area, or the manner in which subjects are to be taught. Rather, course outlines, lesson plans, and other training aids prepared by training organizations responsible for training recreational scuba instructors shall be used as guidelines for the sequencing and emphasis of course content requirements presented in these standards. Decisions as to sequencing and emphasis are at the discretion of the certifying training organization, to be made within the context of environmental factors, instructor characteristics, and other relevant considerations.

Instructor certification qualifies a certified instructor to engage in training and certifying of recreational scuba divers. It is the intent of these standards that such individuals will have received sanctioned training in the fundamentals of training recreational scuba divers. A certified instructor is qualified to apply the knowledge and skills outlined in these standards to conduct academic and scuba skills training and to certify recreational divers through a training organization.

2. Definitions

certification. A document indicating that the bearer has completed all requirements of a recreational scuba instructor certification course. This verification is issued by a training organization upon the instructor trainer/evaluator's written authorization, confirming satisfactory completion of all course requirements, as documented in the bearer's individual log/training record and the training organization's equivalent documentation.

current. Certification or documentation issued that has not reached its expiration date prior to the issuing of scuba instructor certification.

dive supervisor. An individual who is currently qualified and sanctioned by a training organization to assist an instructor in teaching recreational scuba divers and to conduct supervised diving activities as outlined by his/her training organization. Completion of formal training in planning, management and control of diving activities, first aid, cardiopulmonary resuscitation, and diver-rescue techniques is required. The dive supervisor shall also have passed a written examination demonstrating dive supervisor-level knowledge, as required by the training organization. To be sanctioned, the dive supervisor must meet the annual renewal requirements of the training organization. (See the RSTC Recreational Dive Supervisor certification stan-dards for details).

diver rescue. Training offered by a training organization that includes diving-specific classes in emergency planning and accident management, along with open water training in the areas of self aid, self assist, buddy aid, buddy assist, locating, surfacing and egress of an unresponsive diver, diver emergency planning and ac-cident management procedures.

instructor. An individual who is currently qualified and sanctioned by a training organization to teach rec-reational scuba diving and authorize the issuance of recreational scuba certification. To be sanctioned, the instructor must meet the annual renewal requirements of the training organization.

instructor course. The course of instructor training leading to instructor certification by a training organization. Successful completion of a course that meets or exceeds these standards qualifies an individual to apply the knowledge and skills outlined in these standards to conduct academic and scuba skills training and to certify recreational scuba divers through the training organization.

minimum instructor candidate diving system. The equipment required to be worn by

candidates while performing the skills listed in 4.7, 4.8, 5.4, 5.5 and 5.6. This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low-pressure inflator, back-pack, regulator, alternate air source (active scuba/air delivery system), submersible pressure gauge, weight ballast system, and exposure suit (if appropriate), timing device, depth gauge, knife/diver's tool (unless prohibited by law or regulation at the dive site), dive tables, compass/direction monitor and emergency signaling device.

out-of-air emergency alternatives. Procedures allowing a diver to ascend to the surface in the event of an out-of-air situation.

dependent procedures include: alternate air source; buddy breathing; redundant air supply (provided by buddy).

independent procedures include: emergency ascent; redundant air supply.

3. Prerequisites

In order to qualify for enrollment in an instructor course, a candidate shall meet the following minimum prerequisites:

(1) Age. The candidate shall be at least 18 years of age; there is no upper limit.

(2) Dive Experience. An evaluation conducted by the instructor trainer/evaluator of the candidate's dive experience that includes, but is not limited to:

- 1. At least 6 months of diving experience;
- 2. 60 logged dives

3. Broad based experience (e.g., advanced, night, deep, navigation, and search and recovery) since entry level certification, as documented in the candidate's

individual log book/training record or equivalent documentation.

(3) Minimum Instructor Candidate Diving System. The candidate shall possess the minimum instructor candidate diving system.

(4) Minimum Candidate Certification. The candidate shall have completed the

requirements and be certified at the dive supervisor level, or must receive the required dive supervisor training during the instructor course.

4. Eligibility for Certification

(1) **Medical Examination.** The candidate shall have, within the past year, a medical examination and approval for diving, without conditions or restrictions, by a licensed physician prior to engaging in water activities. In no event shall medical approval be accepted, wherein the physician signing the approval is the participating candidate.

(2) **Physical Conditioning and Watermanship Evaluation.** The candidate shall effectively demonstrate basic watermanship ability by performing the watermanship evaluation required by the training organization. This watermanship evaluation shall include a continuous 400 yard (366 metre) surface distance swim and a 10 minute survival swim/float without the use of mask, fins, or snorkel, or of other swimming aids.

(3) Acknowledgment and Assumption of Risk. Candidates shall be informed of the inherent risks of scuba and shall agree to sign appropriate forms acknowledging and assuming those risks prior to participating in water activities. These forms may include, but are not to be limited to: liability release; waiver and release of liability; affirmation

and liability release; assumption of risk; limitation of liability; safe diving practices; standards for safety; statement of understanding; etc.

(4) **Knowledge.** The candidate shall demonstrate instructor-level knowledge of scuba diving by taking and passing a written examination. Documentation of the examination shall be permanently retained by the training organization. This examination shall test instructor-level knowledge of equipment, physics of diving, physiology of diving, medical problems related to diving, decompression theory, use of dive tables, dive computers, dive environment and training standards as specified by the training organization and as outlined in 5.2.

(5) **Scuba Skills.** The candidate shall satisfactorily demonstrate, to an instructor trainer/evaluator, instructor-level scuba skills required by the training organization and as outlined in 5.4 and 5.5, covering pool/confined water and open water scuba skills, respectively.

(6) **CPR.** At the time of certification, the candidate shall complete, and have current, training in CPR as required by the training organization. CPR may be taught during the instructor course, but may not be counted toward the 100 total training hours.

(7) **First Aid.** At the time of certification, the candidate shall complete, and have current, training in First Aid as required by the training organization. The candidate shall be competent in practical use of emergency oxygen during a diving emergency, unless prohibited by local law. First Aid may be taught during the instructor course, but may not be counted toward the 100 total training hours.

(8) **Diver Rescue.** The candidate shall complete training in diver rescue skills as required by the training organization and as outlined in 5.6. The candidate shall also satisfactorily demonstrate, to an instructor trainer/evaluator, at least one complete open water rescue as required by the training organization. Diver Rescue may be taught during the instructor course and may be counted toward the 100 total training hours.

(9) **Dive Supervisor.** The candidate shall complete training in group control and supervision of diver activities as required by the training organization. Dive Supervisor may be taught during the instructor course and may be counted toward the 100 total training hours.

(10) **Teaching Presentation Training.** The candidate shall complete training in lesson preparation, planning and delivery of lecture, pool/confined water skills and open water skills teaching presentations as required by the training organization and as outlined in 5.3, 5.4 and 5.5.

(11) **Training Hours.** The candidate shall complete at least 100 total training hours of specialized training/evaluation. A minimum of 50 training hours are to occur under the supervision of an instructor trainer/evaluator and include the topics outlined in Section 5. The remaining hours are to include, but are not limited to, the training outlined in 4(8) and 4(9).

(12) **Dive Experience.** At the time of certification, the candidate shall have at least 100 verifiable logged dives.

5. Minimum Course Content

The course shall consist of the topics and scuba skills required by the training organization and as outlined in this section.

5.1 Introduction. The following information should be made available to candidates before or during the first class meeting.

- (1) Certification requirements (see Sections 3 and 4)
- (2) Scope of course
- (a) Content
- (b) Limitations of eventual qualification
- (3) Equipment requirements
- (4) Course procedures

5.2 Course Topics. The candidate shall complete training under the supervision of an

instructor trainer/evaluator. Training is to include the topics required by the training organization and as outlined in this section.

- (1) Lesson preparation, lesson planning and lesson delivery
- (2) Pool/confined water and open water procedures
- (3) Pool/confined water and open water problem solving
- (4) The training organization's training standards
- (5) The training organization's requirements for diver certification
- (6) Professional and ethical responsibility of a recreational scuba instructor

(7) Instructor-level knowledge of equipment, physics of diving, physiology of diving, medical problems related to diving, decompression theory, use of dive tables, dive computers and dive environment.

- (8) Local laws and regulations affecting scuba diving services.
- (9) Dive site selection.

5.3 Candidate Lecture Presentations. The candidate shall demonstrate, to an instructor

trainer/evaluator, lesson preparation, planning and delivery of at least three teaching presentations from the topics outlined in the agencies training materials as required by the training organization. The suggested topics may include:

- (1) Equipment
- (2) Physics of diving
- (3) Medical problems related to diving
- (4) Use of dive tables
- (5) Dive Environment
- (6) Dive planning

(a) Planning and preparation, with emphasis on the prevention of out-of-air situations and emergencies

- (b) Emergency procedures
- (c) Accident management/prevention
- (7) Communications, both under water and on the surface
- (8) Diver assistance (self/buddy)
- (9) Recommended diving practices, including safety stops
- (10) Procedures for diving from boats

5.4 Pool/Confined Water Scuba Skills. The candidate shall demonstrate, to a certified instructor trainer/ evaluator, personal scuba skills as outlined in this section and as required by the training organization. In addition, the candidate is to complete lesson preparation, planning and delivery (including briefing and debriefing), group control and supervision, and problem solving for at least three pool/confined water skills teaching presentations from the topics outlined in this section and as required by the training organization.

- (1) Diving system assembly and disassembly (at water's edge)
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing snorkel and regulator
- (6) Regulator/snorkel exchanges at the surface
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask-clearing, including removal and replacement
- (10) Underwater exercises with and without mask

- (11) Buddy-system techniques
- (12) Underwater and surface buoyancy control
- (13) Underwater problem-solving (regulator recovery/retrieval, etc)
- (14) Surface-snorkel swimming with full diving system

(15) Surface operation of the quick release/emergency function of the weight system

- (16) Removal and replacement of weight/ballast system
- (17) Removal and replacement of scuba system
- (18) Out-of-air emergency alternatives
- (19) Equipment care and maintenance (at water's edge)

5.5 Open Water Scuba Skills. The candidate shall demonstrate in open water, to a certified instructor trainer/evaluator, lesson preparation, planning and delivery (including briefing and debriefing), group control and supervision, and problem solving for at least three open water skills teaching presentations from the topics outlined in this section and as required by the training organization.

- (1) Diving system assembly and disassembly (at water's edge)
- (2) Equipment inspection (at water's edge)
- (3) Entries and exits
- (4) Proper Weighting
- (5) Mouthpiece clearing snorkel and regulator
- (6) Regulator/snorkel exchanges at the surface
- (7) Controlled descents and ascents
- (8) Underwater swimming
- (9) Mask-clearing
- (10) Buddy-system techniques
- (11) Underwater and surface buoyancy control
- (12) Diver assistance techniques (self/buddy)
- (13) Surface-snorkel swimming with full diving system
- (14) Underwater problem-solving (regulator recovery/retrieval, etc.)
- (15) Removal and replacement of weight/ballast system
- (16) Removal and replacement of scuba system
- (17) Out-of-air emergency alternatives
- (18) Equipment care and maintenance (at water's edge)
- (19) Underwater navigation

5.6 Open Water Rescue. The candidate shall demonstrate in open water, to a certified

instructor trainer/evaluator, at least one complete open water rescue as required by the training organization.

Recreational Scuba Instructor Trainer

1. Scope and Purpose

These standards provide minimum content requirements for a new instructor trainer (Course Directors, etc.). These requirements should not be considered standards for optimum training of an instructor trainer. Instructional programs which extend beyond these requirements should, in fact, be encouraged. The requirements of these standards are meant to be comprehensive, but general in nature. That is, the standards present all of the subject areas essential for minimum training of a recreational scuba instructor trainer, but they do not give a detailed listing of the skills and information encompassed by each area. These items are simply listed in the standards; it is assumed that detailed course outlines, which meet these standards, would include specific techniques. For a list of the training organizations, which have published highly, detailed course outlines that meet the standards, see Appendix A.

Although the information categories outlined are given in what may appear to be a logical sequence, the outline should not be reviewed as a lesson plan. That is, the order in which the information is pre-sented in the standards does not necessarily define the sequence of a class lesson plan. Similarly, the requirements presented in the standards presented in this document do not indicate the emphasis that should be placed upon a particular subject area, or the manner in which these subjects are to be taught. Course outlines, lesson plans and other training aids prepared by training organizations responsible for recreational scuba instructor trainer training are to be used as standards. Decisions as to sequencing and emphasis are at the discretion of the training organization and are to be made within the context of environmental factors, instructor characteristics, and other relevant considerations.

Instructor trainer certification qualifies a certified instructor trainer to engage in the training of rec-reational scuba instructors. It is the intent of these standards that such candidates will have received sanctioned training in the fundamentals of training recreational scuba instructors. A certified instructor trainer is qualified to apply the knowledge and skills outlined in these standards to conduct educational and scuba skills training for recreational scuba instructor candidates through his/her respective training organization.

2. Glossary of Terms

certification: The bearer has completed all requirements of a recreational scuba instructor trainer certification course. This verification is issued by a training organization upon the instructor trainer evaluator's (usually a headquarters staff member of the training organization) written authorization confirming the satisfactory completion of all course requirements (as documented in the bearer's candidate log/training record).

certified recreational scuba diving instructor trainer: An candidate currently

qualified and sanctioned by a training organization to conduct instructor-level training for that organization. (Note: The instructor trainer certification does not necessarily authorize the instructor trainer to conduct all course levels for a training organization. To teach some courses, further training and/or experience may be required, depending on the standards of candidate training organizations). In order to be sanctioned, the instructor must meet the annual renewal requirements of the training organization, as well as meet any other requirements required by that organization to maintain the instructor trainer credential, such as attending periodic updates.

instructor trainer course: The initial course of instructor trainer training leading to instructor trainer certification issued by a training organization. Successful completion of a course, which meets or exceeds these standards qualifies an candidate to apply the knowledge and skills outlined in these standards to conduct educational and scuba skills training for recreational scuba instructor candidates through his/her respective training organization.

qualified instructor trainer diving system: An individual currently qualified by the training organization to teach instructor trainer courses, and evaluate and certify instructor trainers.

minimum instructor trainer diving system: This equipment includes, as a minimum: fins, mask, snorkel, cylinder and valve, buoyancy control device with low pressure inflator, backpack, regulator, alternate air source, (active scuba/air delivery system), submersible pressure gauge, weight ballast system, exposure suit (if appropriate), timing device, depth gauge, knife/diver's tool (unless prohibited by law or regulation at the dive site), dive tables, compass/direction monitor, and emergency signaling device.

current: Certification or document issued which has not reached its expiration date prior to the issuing of instructor trainer certification.

dive rescue: Training offered by a training organization that includes diving specific classroom and water training in the areas of self aid, self assist, buddy air, buddy assist, locating, surfacing and egress of an unresponsive diver, diver emergency planning and accident management procedures.

instructor counseling techniques: The methodology of instructor candidate counseling. Instructor trainer candidates learn counseling techniques used to create a positive learning environment for instructor training by guiding and providing useful, individual critique to instructor candidates in all aspects of diver education, including academics, pool/confined water and open water training.

3. Prerequisites

(1) Age. The candidate shall be at least 21 years of age; there is no upper limit.

(2) Medical examination. The candidate shall have a current medical examination and approval for diving by a licensed medical practitioner as required by the certifying training organization prior to engaging in scuba water skills.

(3) Dive Experience. An evaluation conducted by the instructor trainer/evaluator of the candidate's dive and teaching experience that includes, but is not limited to:

- 1. At least 2 years of teaching experience
- 2.200 logged dives.

3. Broad based teaching experience (e.g. open water, specialty, advanced, leadership levels as required by the individual agency) having taught a minimum of 150 students.

(4) Minimum Instructor Trainer Diving System. The candidate shall possess the minimum instructor trainer diving system.

(5) Minimum Instructor Certification. The candidate shall have completed the requirements of and be certified, at least as a recreational scuba instructor. In addition, the candidate shall have been a current instructor for at least two years, with no verified quality assurance complaints on file in the last 12 months.

(6) **Demonstration Support.** The candidate shall have demonstrated support of his/her training organization by conducting training and imparting philosophy consistent with that organization's standards and methodology as outlined in the organization's

instructor manual. In addition, the candidate shall have used his/her training organization's complete system of diver education, which includes the use of that organization's training materials.

4. Eligibility for Certification

In order to be certified as an instructor trainer, a candidate shall meet the following minimum eligibility requirements.

(1) **Knowledge.** The candidate shall take and pass, according to criteria established by the training organization, a written examination of his/her certifying training organization's training standards and procedures, and documentation for the examination shall be retained by the certifying training organization.

(2) **Scuba Skills.** The candidate shall satisfactorily demonstrate to a qualified instructor trainer evaluator, demonstration-quality scuba skills required by the training organization and as outlined in Section 5 of these standards. Documentation of successful scuba skills performance shall be retained by the certifying training organization.

(3) **CPR.** At the time of certification, the candidate shall complete, and have current, training in CPR as required by the training organization. CPR may be taught during the instructor trainer course, but may not be counted toward the 100 total training hours.

(4) **First Aid.** At the time of certification, the candidate shall complete, and have current, training in First Aid as required by the training organization. First Aid may be taught during the instructor trainer course, but may not be counted toward the 100 total training hours.

(5)**Diver Rescue.** The candidate shall satisfactorily demonstrate to a qualified instructor trainer evaluator, Instructor trainer-quality simulated diver rescue skills by completing at least one open water rescue as required by the training organization and as outlined in section 5.3 of these standards. Documentation of successful diver rescue performance will be retained by the certifying training organization.

(6)**Teaching Presentation.** The candidate shall demonstrate to a qualified instructor trainer evaluator Instructor Trainer-quality lesson preparation, planning and delivery of lecture, pool/confined water skills and open water skills teaching presentations as required by the training organization and including topics as outlined in Section 5 of these standards. Documentation of successful teaching presentation performance will be retained by the certifying training organization.

(7)**Teaching Presentation Evaluation.** The candidate shall demonstrate to a qualified instructor trainer evaluator the ability to evaluate instructor candidate teaching presentations as required by the training organization and including : delivery of lecture, pool/confined water skills and open water skills teaching presentations. Documentation of successful teaching presentation evaluation performance shall be retained by the certifying training organization.

(8) General Attitude and Professionalism. The candidate shall demonstrate an appropriate, positive attitude and appearance, and maintain a role-model image for his/her recognition training organization.

(9)**Training Hours.** The candidate shall complete at least 100 hours of specialized training/evaluation and is to include the topics outlined in Section 5, as well as Section 4.1, 4.2, 4.5, 4.6, 4.7 and 4.11 under the direction of a qualified instructor trainer and/or evaluator.

(10) **Training Records.** Appropriate Instructor Trainer course records are to be retained by the training organization.

(11) The candidate shall have staffed at least one instructor training course for his/her training organization.
5. Minimum Course Content

5.1 Introductory Information. The following information should be made available to instructor trainer candidates prior to, or during, the first class meeting.

- (1) Certification Requirements (see section 3 and 4)
- (2) Scope of course
 - A. Content
 - B. Limitations of eventual qualifications
- (3) Equipment requirements
- (4) Course Procedures
- (5) Course materials requirement

5.2 Course Topics, Exercises and Practicums. The candidate shall complete training under the supervision of a qualified instructor trainer/evaluator. Training is to include the topics, exercises and course practicums as required by the training organization and as outlined in this section.

(1) Lesson preparation, planning, and delivery.

(2) Instructor Trainer-quality scuba skills as required by the training organization and as outlined in Section 5.5

(3) Delivered at least two Instructor Trainer-quality lecture teaching presentations, two pool/confined water skills teaching presentations and two open water skills teaching presentation taken from the certifying training organization's scuba training program as required by the training organization and selected by the instructor trainer/evaluator.

(4) Deliver lecture-teaching presentations taken from the certifying training organization's instructor training course.

(5) Evaluate lecture teaching presentations, pool/confined water skills teaching presentations and open water skills teaching presentations taken from the certifying training organization's scuba training pro-gram as given by other instructor trainer candidates or instructor candidates.

(6) Discussion of the training organization's requirements for diver certification.

(7) Review and discussion of the training standards and

procedure of the training organisation .

(8) Discussion of the role of the instructor trainer, including professionalism and ethical responsibility.

(9) Indication of knowledge as outlined in 4.1

(10)Practice instructor counseling techniques

5.3 Diver Rescue. The candidate shall demonstrate to a qualified instructor trainer evaluator Instructor Trainer-quality performance of diver rescue skills as required by the training organization and including open water rescue of a victim simulating unconsciousness/non-breathing at the surface.

5.4 Lecture Presentations. The candidate shall demonstrate to a qualified instructor trainer evaluator Instructor Trainer-quality lesson preparation, planning and delivery of at least two lecture teaching presenta-tions, evaluate at least two lecture teaching presentations, and practice instructor counseling techniques for these presentations taken from course topics as required by the training organization and as outlined in this section and selected by the instructor trainer/evaluator.

- (1) Equipment
- (2) Physics of Diving
- (3) Medical problems related to diving
- (4) Use of diving tables, decompression theory, dive computers
- (5) Dive environment
- (6) Dive planning

a. Planning and preparation, with emphasis on the prevention of out-of-air situations and emergencies.b. Emergency procedures

- c. Accident management/prevention
- (7) Communications, both underwater and on the surface
- (8) Diver assistance (self/buddy)
- (9) Recommended safe diving practices
- (10) Boat diving procedures

In addition, the candidate shall demonstrate to a qualified instructor trainer evaluator lesson preparation, planning and delivery of at least three lecture teaching presentations from instructor training course topics as required by the training organization and as outlined in this section.

- (1) Instructor-level continuing education
- (2) Diving industry overview
- (3) Entry-level course overview
- (4) Continuing education courses overview
- (5) Dive tables, decompression theory, and dive computers
- (6) Academic lessons planning
- (7) Pool/confined water skills teaching workshop
- (8) Open water skills teaching workshop
- (9) Standards and procedures, quality assurance

5.5 Pool/Confined Water Scuba Skills. The candidate shall demonstrate to a qualified instructor trainer evaluator Instructor Trainerquality personal diving skills as outlined in this section, in addition to Instructor Trainer quality lesson preparation, planning and delivery (including briefing and debriefing), group control and supervision and problem solving for at least two pool/confined water skills teaching presentations from the course topics as required by the training organization and as outlined in this section. Candidates shall also evaluate at least two teaching presentations on topics listed below and practice instructor-counseling techniques for these presentations.

- (1) Diving system assembly and disassembly
- (2) Equipment inspection
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing (snorkel and regulator)
- (6) Regulator retrieval
- (7) Regulator/snorkel exchanges at the surface
- (8) Controlled descents and ascents
- (9) Underwater swimming
- (10) Buoyancy control exercises
- (11) Buddy system techniques
- (12) Underwater problem solving
- (13) Surface snorkel swimming with full diving system
- (14) Weight/ballast system removal and replacement
- (15) Scuba system removal and replacement
- (16) Out of air emergency exercises

5.6 Open Water Training. The candidate, wearing an instructor trainer diving system, shall demonstrate to a qualified instructor trainer evaluator in the open water, Instructor Trainer-quality lesson preparation, planning and delivery (including briefing and debriefing), group control and supervision, and problem solv-ing for at least two open water skills teaching presentations as required by the training organization and as outlined in this section. The candidate shall also evaluate at least two presentations from topics outlined in this section and practice instructor counseling techniques for these presentations.

- (1) Diving system assembly and disassembly
- (2) Equipment inspection
- (3) Entries and exits
- (4) Proper weighting
- (5) Mouthpiece clearing (snorkel and regulator)
- (6) Regulator retrieval
- (7) Regulator/snorkel exchanges at the surface
- (8) Controlled descents and ascents
- (9) Underwater swimming
- (10) Mask clearing
- (11) Buddy system techniques
- (12) Buoyancy control exercises
- (13) Diver assistance techniques
- (14) Surface snorkel swimming
- (15) Weight/ballast system removal and replacement
- (16) Scuba system removal and replacement
- (17) Out of air emergency exercises
- (18) Equipment care and maintenance