General Course Standards

November 2009



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Introduction Section 1 1.1 Introduction to ANDI

ANDI International (ANDI) is one of the world's fastest growing diver training agencies. ANDI began by specializing in training programs for Enriched Air Nitrox (SafeAir) diving. As a natural evolution from SafeAir®, ANDI developed training programs for what has now become known as Technical diving and Closed Circuit Rebreather systems. To meet the demands of our international network of training facilities, in 1999 ANDI introduced a unique methodology for training entrylevel divers with the ANDI Open Water Sport Diver program.

Since our origin in 1988, ANDI has expanded throughout the world with Regional Headquarters located in the United Kingdom, Israel, Italy, Germany, The Netherlands, Greece, Japan, Taiwan, Republic of Korea, Republic of Philippines, Spain, Thailand, Venezuela and the home office in the United States of America. To meet the needs of these regional markets ANDI developed educational material in many languages in addition to English.

ANDI has developed a multifaceted training system with comprehensive programs. These include Openwater Sport Diver, Dive Medic, SafeAir® User courses, Technical and Exploration programs, Rebreather training for SCR and CCR systems, specialty-focused training and a full offering of technician and instructor programs. ANDI's growth throughout the world is due to ANDI's commitment to quality education, quality training materials, the highest operational standards and a dedication to customer service.

Mission Statement January 2007

Slogan: ANDInternational - Dive The Future®

ANDI will be a committed global champion in all aspects of recreational and technical diving, dedicated to ...

the health and well-being of divers, through innovative and educationally valid programs, adventurous techniques, inspired solutions, and optimal breathing gas selection and purity, that encourage safe participation by all with minimal risk and the preservation of the aquatic environment for future generations.

ANDI will continue to shape and lead the markets in which we choose to compete by ...

expanding our international presence through regional offices that encourage cultural diversity, local support and equal opportunity

building a unique and expanding portfolio of diving-related products, knowledge and skills earning the loyalty of our customers through long-lasting beneficial relationships consistently meeting or exceeding our commitments

continuously striving to further elevate our image as "the diving company that informed divers use"

outperforming competitors in quality, innovation, and value.

We will be known for our high standards, integrity, reliability and the entrepreneurial growth opportunities we create within a participatory culture, so that members, staff and divers may fulfill their highest potential, and be rewarded for their affiliation with ANDI and its core values.

ANDI HQ and ANDI Regional HQ Offices

Throughout these standards, when the term "ANDI" is used, it refers to your Regional ANDI HQ (RHQ), or if your region is not administered by a regional office, ANDI HQ, USA. Local law prevails however any variations in these standards must be approved by ANDI HQ. Regional editions of this document in local language are available from the ANDI RHQ.

Contact information for currently licensed ANDI Regional Headquarters can be found on the ANDI website: *andihq.com* or by requesting the information directly from ANDI International.

Section 1.2 The History of ANDI

ANDI's beginnings are a significant part of diving history.

Ed Betts and Dick Rutkowski joined together in 1988 to form American Nitrox Divers, Inc. ("ANDI"). The purpose was to standardize Instructor Training, Sport Diver Training, and refill station dispensing procedures for Enriched Air Nitrox diving.

Richard Rutkowski retired from the USA's National Oceanographic and Atmospheric Administration (NOAA) with 33 years of service in 1985. He served as Deputy Diving Coordinator and was the founder and director of the NOAA Diving/Hyperbaric Training and Diver Treatment Facility. He began teaching what he called "Nitrox Diving" for sport divers in 1987 under his IAND company. He is directly responsible for introducing this major advancement into the Sport Diving Industry.

After contractually agreeing to close IAND and work *exclusively* with ANDI, Dick *sold* IAND to an ANDI IT, Tom Mount. Although both companies continued, this act caused the founders to acrimoniously separate. Tom Mount continued with IAND under the trade name IANTD.

Ed Betts was the co-founder of Island Scuba Centers, Inc. (ANDI # 1), of Freeport, New York in 1968. The Betts Family closed Island Scuba Centers in 1997 after 29 years of service to the local diving community. At that time it was Long Island's oldest full-service scuba facility and had been one of the world's first "high tech" dive centers.

Ed has extensive experience as a practical engineer. He designs and installs specialty gas production / delivery systems and hyperbaric chambers and frequently consults in the area of gas and distribution systems and diving equipment design.

Ed is founder and Executive Director of ANDI and has authored numerous published articles, instructor manuals and student text books.

It was through Ed's efforts and business acumen that so many of the standards and procedures that were developed by ANDI are now standard practices in the diving industry of today. In addition, Ed was the first individual to introduce SafeAir®, technical and rebreather diving to many parts of the world.

When the first production-run recreational rebreather was marketed by Dräger of Lubeck Germany, it was ANDI that produced the first training manual in English and German. Since then ANDI has closely followed the emerging rebreather market. As new production product has become available ANDI has produced manufacturer-approved training materials of the highest quality.

In 1991, ANDI trained and opened the first EAN facility outside of the USA. The concept and technology quickly spread as ANDI expanded throughout the world. ANDI's concept of "optimal breathing gas technology", at first shunned and criticized by the entire industry, has now become a standard part of diving practice.

As of September 2004, ANDI has training facilities in 68 countries and Regional Headquarters located in the United Kingdom, Israel, Australia, Sweden, Italy, Germany, Austria, Greece, Japan, Taiwan, Republic of Maldives, Latin America and the home office in the United States of America. This growth throughout the world is due to ANDI's commitment to quality education, quality training materials and our dedication to dealer service.

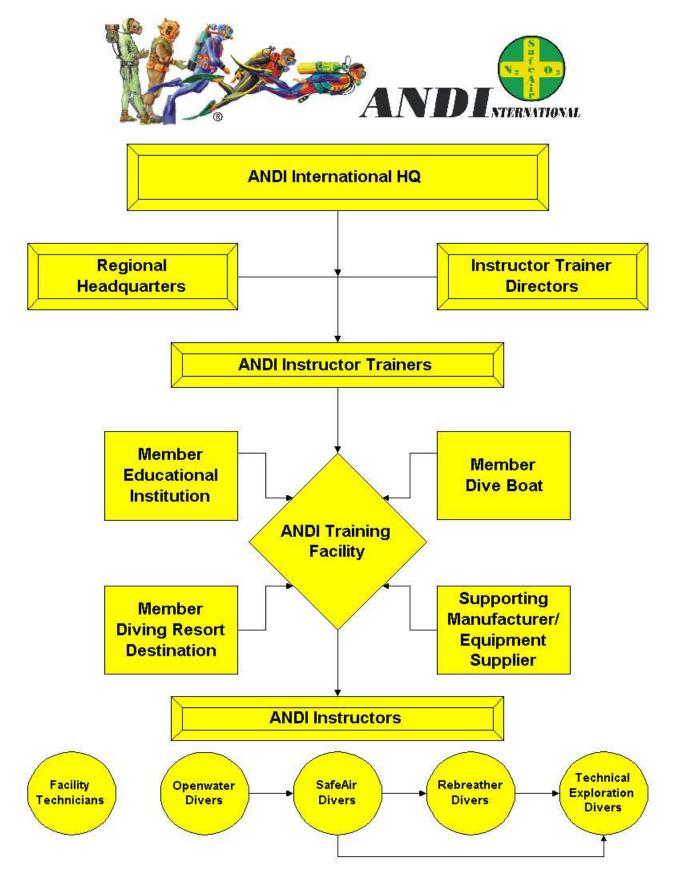
ANDI's educational material is available in several languages in addition to English. These include Hebrew, Italian, German, Swedish, Dutch, French, Greek, Polish, Russian, Chinese Japanese, and Spanish with others in process.

1.3 Organizational Flow Chart

See the following page.

For a graphic representation of the various educational paths offered by ANDI see Section 6.8

ANDI standards and recommendations are modified and updated when deemed necessary by ANDI. It is the responsibility of the ANDI facility and instructor to maintain current copies of all standards and recommendations.



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1.4 A partial list of ANDI's many significant accomplishments

- ► The world's first instructor's teaching manual for EAN diving
- The world's first integrated student training manual for EAN diving
- ► The industry's first Gas Blending and Oxygen Handling text
- ► The industry's first Equipment Servicing Procedures for Oxygen & EAN dedicated equipment text
- The world's first Gas Blender and Service Technician's training courses
- The industry's first breathing gas purity standards for gases other than Air
- ► The world's first international dealer network of EAN facilities
- The industry's first EAN-dedicated equipment marking and identification procedures.

 A full range of support products, invented by ANDI, are now industry standards. The first Enriched Air cylinder inspection sticker, color wrap decal and cylinder contents tag.
- The first manufacturer-endorsed equipment standards. ANDI the leader in Equipment Handling standards which are unchanged since 1991 because they are fundamentally correct. ANDI has the highest standards in the industry, world-wide.
- The USA's first insurable/insured Enriched Air Nitrox training program and the industry's first multi-agency, multi-level professional liability insurance program.
- ► The *only* Oxygen / EAN compatibility designation sleeves and stickers.
- The first multi-language offering of textbooks and training materials for advanced diving technologies.
- The first international training agency to offer all ranges of diver education.
- ► The first diver training agency to qualify for ISO-9000 accreditation. Sept.2008
- The leader in Educational Quality Assurance with **the best safety record of any**International Training Agency. While others also make this claim, they cannot truthfully state that their record reads, "no training accidents; no claims made".

Section 2 ANDI Membership

2.1 Membership Status

ANDI membership is available to those individuals qualifying for ANDI certification as Divemaster, Assistant Instructor, Instructor, Advanced Instructor and Instructor Trainer. The rating of Instructor Trainer Director is achieved only through appointment by ANDI's Executive Director.

ANDI members are entitled to obtain professional liability insurance under ANDI's current insurance program. Individuals are authorized to perform within the limits of their role definition which is found under the specific rating's *Instructor Procedures*.

Membership is to be renewed annually. Membership duration runs from 1 January to 31 December. First-time license fees paid after 1 October will cover the following calendar year.

2.2 Ethical Requirements

As industry professionals ANDI members are expected to always conduct themselves in a manner that commands respect, demonstrates integrity and brings credit to themselves, other ANDI members, their affiliate training facility and ANDI International. The following guidelines are meant to illustrate the minimum standard of conduct expected of ANDI members.

- 1. Follow and comply with all ANDI standards as required by the RHQ.
- 2. Refrain from making derogatory or inflammatory comments about other agencies and other ANDI members. Do not initiate or participate in derogatory conversations concerning other industry professionals.
- 3. Be honest and forthright in all business dealings. Endeavor to meet all financial commitments in accordance with good business practice.
- 4. Do not misrepresent your experience level or training capability.
- 5. Avoid any practice or policy that undermines the profitability of ANDI training programs or the well-being of other ANDI members and ANDI International.
- 6. Always promote and demonstrate by example the safest diving practices.

2.3 Member Status Definitions

Current (or Renewed) Status

The ANDI member in *Current Status* is defined as having paid the current year's license fees and has a current renewal application on file with ANDI. Annual license decals are available for placement on the certification card to indicate Current Status. The requirements are:

- 1. The ANDI member has received the latest training bulletins for the last 12 months or from the date of joining if less than 12 months pertaining to the members rating level.
- 2. The ANDI member has met the requirements for certification, paid the current year's license fee and has a current application on file with ANDI RHQ.

An ANDI Training Facility in *Current Status* is defined as having paid the current year's license fees and has a current renewal application on file with ANDI HQ.

Teaching Status

ANDI Assistant Instructors, Instructors, Advanced Instructors and Instructor Trainers may only be granted Teaching Status after application for those courses and programs in which current experience and proficiency is maintained. Instructors may only renew to the level of proficiency maintained.

A member must be in *Teaching Status* to conduct any ANDI program. *Teaching Status* ANDI members are authorized to teach ANDI courses up to and including the level to which they are certified provided that they have the most current training materials and any pertinent update bulletins. It is a co-responsibility that both instructors and facilities monitor this requirement.

Teaching Status members must train students through a current / renewed ANDI Training Facility. Any variation of this standard requires an exemption issued from Regional HQ. A waiver request form is included in all instructor manuals and may be requested from any RHQ.

Teaching Status is defined as follows:

- 1 Current year's license fees paid.
- 2 Current year's membership application on file at ANDI RHQ.
- 3 Having current ANDI insurance or approved insurance specifically covering all ANDI programs in which certification is held. Refer to Regional HQ for specific insurance requirements.

AND

a) Have conducted at least 1 course during the previous renewal period at the highest instructor level attained or became an ANDI Instructor during the previous calendar year.

OR condition "b"

b) If condition "a" has not been met within the previous calendar year, the instructor must have audited or assisted 1 full program at the level for which they are applying and have accompanying verification of attendance by the course instructor sent to Regional HQ at the time of renewal.

OR condition "c"

- c) Have attended a complete ITC as an auditor at the level for which they are applying and have the course Instructor / Instructor Trainer send to Regional HQ verification of attendance at the time of renewal.
- 4 Instructors who have not met the above conditions a or b or c within the past 2 renewal periods (current period included), must assist at one course with an active teaching instructor at the level and designation applied for and have the course Instructor send to Regional HQ verification of attendance. Administration fees may apply.
- 5 Instructors who have not met the above conditions within the past 3 renewal periods are considered in "non-teaching status" even if the current year's license fee is paid. These instructors must attend a complete ITC as a new instructor applicant would.
- Have met other conditions as may be required by the RHQ in a specific location to comply to local government guidelines and regulations.

Non-teaching Status

A member in *Non-teaching Status* is defined as a member who has renewed for the current year but cannot meet the requirement for *Teaching Status*. Non-teaching Status instructors are not eligible to train students without the presence of a *Teaching Status* instructor present or to certify ANDI students and cannot represent themselves as being able to do so. Non-teaching status instructors may assist *Teaching Status* instructors in conducting ANDI programs only if they meet the aforementioned requirements for *Teaching Status* conditions 1, 2 and 3 above.

Hold Status

Instructors in *Hold Status* are not authorized to conduct any ANDI courses.

An instructor is placed in *Hold Status* when a response to an *official request from ANDI Regional HQ has not been responded to within four weeks from date of the request.

In cases of student safety, an instructor may immediately be placed on *Hold Status* pending a response from the instructor.

*An official request is typically sent out guaranteed delivery which may include a safety issue but is not confined to such. Lack of communication or refusing to respond to an official request could in and of itself be grounds to place the instructor on *hold status*.

Suspended Status

An instructor may be placed in *Suspended Status* when the actions of that instructor are deemed detrimental to ANDI or when student safety is jeopardized. An instructor may be placed on *Suspended Status* within 30 Days of Hold Status pending a review of the actions and circumstances by the ITD group and ANDI Regional HQ. Ethical breeches may be sufficient grounds for placement in *Suspended Status*.

Instructors on *Suspended Status* are not authorized to teach ANDI programs and cannot represent themselves as being able to teach ANDI programs.

ANDI professional liability insurance is voided and does not cover a Suspended Status instructor.

An ANDI Training Facility's license status may be in jeopardy should an affiliated ANDI instructor be found to be in non-compliance with ANDI standards if this instructor is the only ANDI instructor affiliated with this ANDI Training Facility.

Inactive Status

Members are placed in *Inactive Status* for non-payment of membership dues, anything revoking their active teaching status or by notice from the ANDI RHQ and are considered non-members. No RHQ or HQ mailings or bulletins will be sent to *Inactive Status* past members.

Section 3 Training Limitations

3.1 Confined Water

A swimming pool or confined body of water similar to pool-like conditions in regard to depth, clarity and calmness without waves or currents. Depths must be controllable and less than 6 meters. An area shallow enough to permit the students to stand up must be easily available. The water's boundaries must be controllable to permit the instructor clear view of the complete water surface.

3.2 Confined Open Water

Any body of water such as a lake, quarry, river, etc. that falls between the definitions of Confined Water and Open Water.

For example: a lake may have both an area that could be considered Confined Water and an area that due to its depth, clarity or calmness would not meet swimming pool like conditions, yet, it does not contain the elements such as availability of depths over 12 meters, waves, currents, and exposure to Ocean aquatic plants, corals, and animals.

For example: a quarry or sink hole may have depth over 12 meters but meets all other Confined Environment conditions.

3.3 Open Water

Any aquatic environment that provides access to waves, currents, ocean aquatic plants, corals or aquatic life and depths greater than 36 fsw / 11 meters. Also, any other body of water not defined above.

3.31 Clear Overhead

For the purpose of Sport Diver training (such as the EN 14153-2 standard for "Autonomous Diver"), all open water dives shall be conducted in water that allows direct vertical access to the surface. Open water training dives therefore shall not be conducted in underwater caves, inside wrecks or below ice.

3.4 Supervision

A "teaching status" ANDI instructor must be present and in control of all ANDI course activities. Supervision may fall under 2 categories:

Direct supervision - the instructor is to personally observe all objectives being met both on land and above/below the water. The instructor must strive to maintain the ability to control all the activities of the students, above and below water.

2 Indirect supervision - the instructor is in the general area and has overall control of the events taking place. The instructor must be prepared to enter the water to aid and assist the students should the need arise.

Direct supervision is to be assumed unless the particular course standard states otherwise.

3.41 Supervisory Judgement

The scuba instructor shall cancel or abort any diving activity if in his/her judgement the environmental conditions, equipment problems or a student's physical or mental condition make this necessary.

3.5 Student to Instructor Ratios

Refer to the individual courses Instructor Procedures for specifics. Listed here are the General Standards.

- For the presentation of theory information and the conduct of exams the student to instructor ratio is limited by the instructors ability to adequately control the students.
- 2 For the teaching of land based skills (e.g. gas analysis, "dry run" emergency procedures, equipment handling skills, etc.) the maximum student to instructor ratio is not to exceed ten to one (10:1). Assistant Instructors (ASI) may conduct most water surface and land-based skills. Refer to the Instructor Procedures for each course.
- For the teaching and evaluation of in-water skills the maximum student to instructor ratio is not to exceed eight to one (8:1) and maybe further restricted by specific course standards. For Level 3, 4, and 5 courses, direct supervision requirements are four to one (4:1) or six to two (6:2) when an ANDI Certified Assistant Instructor also certified to the course level being conducted is assisting the principal instructor.

In-water student to instructor ratios should be reduced if the instructor feels that the existing environmental conditions may affect his/her ability to safely control the students.

3.6 Maximum and Minimum Depth

When varying the percentages of gas in a mixture, a fixed depth loses relevance as the limiting factors vary in direct relation to the gas percentage. To achieve a more meaningful value for maximum depth, it is based upon the partial pressure of the gases involved. If specific gas mixtures are referenced, those mixtures become required and are not optional.

1 *Maximum Depth* is simply, "The deepest dive permitted during training". This is further defined. The maximum depth for any ANDI program is not to exceed the point where the Oxygen in the mixture being breathed exceeds a partial pressure of 1.45 Bar PO₂ during a dive or 1.6 Bar PO₂ during the "at-rest" or decompression phases.

AND

- 1.1 The *Maximum Depth* for any ANDI program is not to exceed the point where the Nitrogen in the mixture being breathed exceeds a partial pressure of 4.0 Bar PN₂ while diving, or as specified in a particular course standards. This limit is further reduced for all courses encompassing the training scope of levels 1 and 2 and where the divers OWD training & experience are limited by the OWD certifying agency.
- 2 The *Minimum Depth* on any ANDI training dive is not to be less than the point where the Oxygen in the mixture being breathed is less than a partial pressure of 0.17 Bar.
- 3 The *Minimum Course Depth* as listed in the specific Instructor Procedures requires that at least one training dive must meet this minimum depth.
- 4 The *Minimum Dive Depth for Certification Credit* should be clear enough. No dive may be credited toward certification that does not exceed that as stated in the specific courses Instructor Procedures.

3.7 Dives per Day

No more than 2 Open Water dives are to be counted as credit for certification purposes, for any individual student, in a single day. Refer to specific course standards for more detail.

Section 4 Equipment

4.1 Required Equipment

- Each student is to be equipped with mask, fins, *snorkel, cylinder, regulator, BCD with low-pressure inflator, submersible pressure gauge, depth gauge, timing device, knife/line cutter/diver's tool, weight system and adequate exposure protection and either dive tables or dive computer. Alternate breathing options must be included and "pony systems" (e.g. RBS) are to be strongly recommended for all Level 1 and 2 training. Refer to the specific procedures as some courses such as the ANDI Openwater course requires that all students & instructors have an RBS for Openwater dives.
 - *A snorkel is not required for CCR programs.
- 2 Redundant **B**reathing **S**ystems (RBS) are required equipment for OWD, CCR and all ANDI programs encompassing Level 3 scope of training. See the specific Instructor Procedures for each course.
- 3 Each instructor is to be equipped with all the items listed for students. For any situation where direct supervision is required, ANDI Instructors are *required* to use **R**edundant **B**reathing **S**ystems or "pony systems" when only one cylinder of "bottom mix" is utilized. Pony systems may be mounted or slung.
- For any dive where an immediate direct ascent to the surface is not possible, a **R**edundant **B**reathing **S**ystem is required for all course participants.

A **R**edundant **B**reathing **S**ystem (a.k.a pony system or RBS) is defined as an additional gas storage and delivery system that contains sufficient gas to allow the diver to return from the furthest point of the dive achievable on the current gas and ascend to a point where another gas supply is available this should take into consideration the possibility of ascent line loss.

For any dive where the divers move away from visual contact with the ascent path, a line reel must be carried with sufficient line length so that it can be deployed if needed to indicate the location of the ascent path.

Ascent path is defined as any continuous marking indicating the path to the next gas change and eventually the surface.

6 For any dive where the divers may lose their normal method of ascent and a direct ascent to the surface is not possible due to decompression obligations, an alternative ascent system must be carried by each diver.

An alternative ascent system is defined as containing, at a minimum, a buoyancy device capable of supporting the weight of a submerged diver and an ascent line that the diver may follow to the surface and use to complete any decompression requirements. The device must be colored so that it is clearly visible to searching boats.

- 7 For any dive planned to include a required decompression stop, a decompression gas requirement calculation must be performed allowing for a carried decompression gas volume of 150 % of the calculated requirement.
- 8 All leadership courses (such as EN 14153-3 "Dive Leader", Divemaster, Assistant Instructor or OW Instructor) must include the instruction and operational evaluation of the use of a Surface Marker Buoy which shall be deployed from under the surface and the use of a line reel during a dive.

4.2 Gas Storage Systems and Markings

For the purpose of these standards, a "gas storage system" is defined as the cylinder and or the gas flow path from the point at which the compressed gas is oxygen clean to the storage cylinder and from the cylinder to the point of connection to the end users cylinder. The end user's cylinder is also a gas storage system.

Any gas storage system that contains an EAN mixture (SafeAir®) must be:

1 Oxygen cleaned prior to use. Compatible components and lubricants must be utilized.

- Once Oxygen clean, the gas storage system must remain dedicated to oxygen clean use or cleaned again after use with a system that is not oxygen clean or when suspected of contamination. Cleaning is also to occur after each hydrostatic test.
- 3 Enriched air service rated by the manufacturer.
- 4 Clearly labeled to indicate that it does not contain air and should also indicate that oxygen enriched air is in the cylinder by:
 - a. A 10cm/4 inch green band with yellow lettering on a yellow cylinder.

OR

- b. A 10cm/4 inch band with a 2.5cm/1 inch yellow border on each side of the green for cylinders not yellow in color.
- c. Any other standard or requirement as specified by Regional HQ necessary to conform to local laws or guidelines.

The any cylinder color standard applies **only** in countries where local regulation or guidelines allow any color cylinders to be used for storing enriched air.

Oxygen enriched air may be indicated by the words "Nitrox", "Oxygen Enriched Air". Cylinders used by ANDI facilities are **required** to use ANDI's standard **"SafeAir® - Enriched Air Nitrox"** decal on all cylinders containing enriched air.

- 5 Marked with a cylinder visual inspection and compatibility sticker indicate the date the cylinder was cleaned and whether it was cleaned for oxygen enriched air or oxygen service.
- 6 If the cylinder will have a diver directly breathing its content it must affixed with a tag indicating:
 - a. Oxygen percentage
 - b. Nitrogen percentage
 - c. Date analyzed
 - d. Maximum operating depth of the gas mixture
 - e. Tester's name
 - f. Cylinder serial number on the reverse side of the tag in case the tag is separated from the cylinder. This can be written with permanent ink felt marker.
- 7 In the case of Heli-ox or Tri-Mix diving cylinders, a contents tag or decal must be affixed and include the Helium concentration PLUS all of the data from Item 6.

4.3 Breathing Equipment Markings

Any breathing equipment in contact with an oxygen-enriched gas, with oxygen content 23 .5 percent or greater, must be marked to indicate enriched air compatibility. This is done by placing the green regulator compatibility designation sleeve over each hose on the regulator and by affixing the compatibility designation sticker to the first stage. Since divers often rearrange the hoses or interchange them, it is recommended that each individual hose be marked to indicate that it has been oxygen cleaned for use with enriched air. Once a hose has been marked it may not be used with a non-oxygen-clean regulator or breathing system.

4.4 Equipment Cleaning

According to ANDI standards the accepted standard of practice is that as specified according to the ANDI textbook for Certified Service Technicians entitled, "EAN and Oxygen Equipment Servicing Procedures".

Refer to the most current version of the aforementioned text for more detailed information.

To breathe gases with an oxygen percentage above 23.5 %, the gas delivery and storage equipment must be cleaned for SafeAir® and / or in accordance with the equipment manufacturers standards.

Section 5 Breathing Gases

5.1 Gas Nomenclature & Specifications

Air is generally defined as 19 to 22 % Oxygen concentration by volume. (Compressed Gas Association (CGA) standard is 19 to 23.5 %, while EUF definition is minimum 20% O_2).

SafeAir[®] is defined as 22 to 50 % oxygen by volume and must match ANDI 's gas purity standard. Compressed Gas Association standard definition of Oxygen Enriched Air is 23.5 to 50 % oxygen.

"NITROX", "EAN" or "Enriched Air Nitrox" may be treated the same as SafeAir® mixtures by ANDI members, however these other references may not meet ANDI's gas purity standard. ANDI's copyrighted phrase illustrates our position;

"Remember, it may be NITROX but if it is not ANDI, it's not SafeAir".

Oxygen mixtures are defined as 51 to 95 % oxygen by volume.

Oxygen is defined as 95 to 100 % oxygen by volume.

To breathe gases with an oxygen percentage between 22 to 50 percent, the equipment must be cleaned for SafeAir® and maintained according to ANDI standards.

To breathe gases with an oxygen percentage between 51 to 100 percent, the equipment must be cleaned for SafeAir® and maintained according to ANDI standards AND be rated by the manufacturer for Oxygen Service. Follow the manufacturer's recommendations; in all cases they may replace ANDI standards.

5.2 Gas Production

- Only persons who possess ANDI certification as a Certified Gas Blender may blend gas, produce SafeAir® and produce gas mixtures other than air at any ANDI member facility. Any ANDI facility's designated technician may dispense *pre-mixed gas* as if it were air into approved gas storage systems.
- 2 Any compressed air that will be mixed with oxygen must conform to the following standards:
 - a. Carbon monoxide no more than 2 part per million (ppm)
 - b. Carbon Dioxide no more than 500 ppm
 - c. Gaseous hydrocarbons no more than 25 ppm. Referenced as Methane (CH₄)
 - d. Condensed hydrocarbons no more than 0.1 mg / M³
 - e. Moisture/water vapor dew point no greater than 50 degrees C
 - f. Solid particles no greater than 2 microns

Since condensed hydrocarbon contaminates are cumulative, if any condensed hydrocarbons are contained within the gas stream, a schedule of periodic maintenance and cleaning of the gas storage, transfer and delivery equipment should be implemented.

- 3 Gas analysis is recommended for all gas dispensing facilities and is required quarterly for ANDI facilities. The above mentioned standard limits are to be specified in the analytical report. These reports are to be copied to ANDI regional HQ.
- 4 An ANDI facility may purchase *pre-mix* from another SafeAir® facility or other source for use in their facility however ANDI gas standards must still be met.
- A new ANDI facility will be given six-months to bring their gas production system and gas quality into accordance with ANDI standards. Until the standards are met, they are not to advertise that they produce SafeAir® (as this indicates a specific set of gas standards).

5.3 Gas Analysis

- 1 All gas mixtures produced other than air must be analyzed for their oxygen content.
- 2 Gas mixtures should be analyzed first, during production of the gas by the gas blender and second, by the end user when control over the cylinder is transferred.

The gas analyzer is to be calibrated prior to use by a new user and at the beginning of anyanalysis process or in accordance with the equipment's manufacturer recommendations.

3 The results of gas analysis by the diver is to be logged at the facility and is to also contain a record of the maximum operating depth for that gas mixture. The ANDI Gas Mixture Validation Book is the only format to be used by ANDI members.

Section 6 Training & Certification

6.1 Definition of Terms

For the purpose of convenience and saving space we have chosen specific codes or abbreviations to explain ANDI programs. Many of these are standard in our industry and others are ANDI-specific. Please refer to the following list for clarification.

- ITC: Instructor Training Course. An assistant Instructor enrolls in this mentor-ship program under the direction of an AOWI or OWIT. Once an Assistant Instructor has completed their ITC as attested to by their mentor instructor, they are now qualified to enroll in an ANDI IEC to be conducted by an IT The OWIT conducting a OWI-IEC must be a different individual than the one conducting the preparation.
- **IEC:** Instructor Evaluation Course. Instructor Evaluation Course. This is an evaluation course designed to test and evaluate new ANDI instructor candidates for OWI or OWIP certification. It requires pre-training by the facility and readiness by the candidate. The assumption is that the candidate is an Assistant Instructor, has undergone additional training & apprenticeship and is ready to be tested. The IEC should not be construed as a course of instruction. The OWI IEC is to be conducted by a different OWIT than the individual who conducted the preparation.
- ICC: Instructor Crossover Course. This is a required course for any non-ANDI instructor to add ANDI to their certification credentials. The resulting certification may be a full certification in any specialty or level or a primary rating such as OWI, AOWI or OWIP depending on the program and the instructor trainer evaluation.
- IC: An additional program offered by ANDI is the standard format for the Instructor Specialty Training Courses. In this format the instructor candidate attends the student/diver program as a non-instructor, is evaluated and polished by the Instructor Trainer and completes the instructor requirements following the course. Each rating has individual specifics. IT's refer to the standard format ANDI document entitled, "Instructor Procedures". The Instructor Procedures will contain the course overview and list the necessary documents and procedures specific to the specialty course.

IT: Instructor Trainer. This is an instructor capable of conducting instructor level programs as defined by ANDI HQ.

AOWI: Advanced Openwater Instructor. A more experienced Openwater Instructor. They are certified to teach OWD's and at least four ANDI specialties. Additionally they may conduct CDM & ASI programs.

OWI: Openwater Instructor. This is an instructor able to certify OWD's, AOW's & after the prerequisite experience may create CDM's. This rating also meets the requirements (EN 14413-2) of an EUF Level-II Instructor.

OWIP: Openwater Instructor Provisional. This is an instructor who has completed a course of instruction by an ANDI OWIT but does not have full OWI status, (often this is a new instructor or one missing a minor prerequisite).

ASI: Assistant Instructor. Certified to supervise un-certified divers or divers -intraining. An instructor in training who has met the same prerequisites and similar training to that of a EU level-I Instructor (EN 14413-1). In the ANDI System they are not authorized to conduct any complete programs on their own, but are permitted to conduct skill teaching and skill evaluation in confined environment conditions. The ASI may review and supervise the practice of skills previously taught and assessed by an OWI in both confined and openwater conditions.

CDM: Certified Divermaster. Equivalent to EN 14153-3 Diver Leader. Leadership level diver who is certified to supervise certified divers of OWD rating or higher.

OWD: Openwater Diver. This is an entry-level certification equivalent to the standard for "Autonomous Diver" EN 14153-2.

LSU: SafeAir® Sport Diver - Level 1, user program for Oxygen-Enriched-Air.

CSU: Complete SafeAir® User. Level 2, user program for Oxygen-Enriched-Air.

Junior Rating. This rating will be used to identify a younger person who has completed ALL requirements of the full certification but because of their age, do not qualify for such. Those between the ages of 12 & up until their 16th birthday will automatically receive a Jr. rating. Jr. divers are limited to diving with their parent/legal guardian, another family member over the age of 18 or an instructor. The maximum depth for a Jr. diver is 57 fsw / 18 meters or as limited by their OWD training agency. The Jr-rating is currently available for OWD, LSU & CSU. See the course specifics Instructor Procedures.

Course Completion: A given course is deemed completed when all "Parts" have been

completed per course procedures. Once a course is started, the student has 6-months to complete all parts or a review / start over at

the instructors discretion.

For the purpose of these standards, the term "current" is defined as having received all training bulletins from ANDI for the last 12 months or from the date of joining that agency if less than 12 months. The term "renewed" is defined as having the current year's dues paid.

6.2 Educational Training Levels

Explains ANDI's concept of "Training Levels" and the scope of a program's contents.

Note: The ANDI system of "Levels" is not to be confused with that of the EU Standards

In order to better differentiate the many programs and their scope of training ANDI attaches a "Level of Training", 1 through 5 for every program. involving diving skills. Non-diving oriented courses have no training level. All courses with the same matching level designation follow the same general scope of training and are geared for the same experience level of the participant.

To explain this concept further, **Level 1** designates an introductory program for new divers or divers-in-training. All Level 1 courses will follow these same limitations: 30m max depth, No-Stop-Required profiles, no decompression training, 1.45 PO₂, 4.0 PN₂ and information of a less complete or less technical nature. For example, only SafeAir® 32 and 36 may be used by LSU L1 students.

All **Level 2** courses can be expected to be of an "advanced recreational" scope of training. Only two cylinders and up to two gases may be employed to limit the task loading. This is essentially the recreational limits that are accepted world-wide: 40m maximum depth, No-Stop-Required profiles, no decompression training, 1.45 PO₂, 4.0 PN₂ and information content of a more complete or more technical nature. For example, the Cavern Diver course is a Level 2 program. A twin-set of cylinders with another gas in an RBS is beyond L2 task loading.

Level 3 training encompasses the first level of what has become known as "technical diving". In general, a more experienced recreational diver is the student prerequisite. Three cylinders and three gas mixes are the task loading limits unless otherwise specified. In addition the training is limited to 40m maximum depth or less, 1.45 PO₂, 4.0 PN₂ or less (depending on the course standards), full decompression training procedures with decompression ceilings limited to 30 minutes (TTM is the exception) and exposure limited to 1.6 PO₂, information content of a complete and technical nature. For example, the Cave Diver course is a Level 3 program.

Training at **Level 4** is considered an "explorer's" program. The training expands on the Level 3 material more in practical experience than in theory. The Level 4 program **does not extend the depth limits** beyond that of a Level 3 program. Depth is not the goal here. The Level 4 course prepares the diver to plan and execute "*mission oriented*" activities. The training involves operating at the reasonable limits of SafeAir diving and incorporates into the dive plan unlimited gas switches and unlimited decompression. For example, the Cave Explorer course is a Level 4 program.

Level 5 formats are exploration courses that involve the use of other inert gases (in addition to Nitrogen), permit unlimited equipment configurations and unlimited decompression. The

operational depth limits are course-limited but usually 100m maximum training depth, 1.45 PO₂, 4.0 PN₂ with unlimited decompression ceilings permitted. Oxygen exposures for decompression are still limited to 1.6 PO₂, and the information content is of the most complete and technical nature. Unlimited cylinders and unlimited gases may be carried by the Level 5 exploration student as specified by the course instructor.

Following the above information, we can at once understand the scope of training and the approximate limitations for a Level 2 or 3 wreck course or a Level 5 rebreather course.

If you have been following the text closely and comparing the various programs and training levels you may note that there is no L4 Rebreather courses. It had been decided that since a rebreather dive at the limits of L2 diving requires the same planning as L3 open-circuit and, L3 rebreather diving involves some serious planning approximating L4 open circuit, the need for a L4 rebreather rating is unnecessary.

6.3 **Open Water Training**

OWI Training and Certification

Candidates will:

- 1. Attend an Open Water Instructor mentor-ship program. (ITC) after certification as ASI.
- 2. Enroll in the ANDI OWI IEC. This course is conducted by a OWIT and must be different individual than the one who conducted the IEC. The ANDI OWIT must be a member in good standing and conduct the IEC in accordance with the course outline detailed in ANDI part # 2-543.
- 3. Successfully pass instructor exams at the level for which they are applying.
- 4. The candidate will be required to demonstrate all the skills expected of a student applying for that level performed in a professional, proficient, exemplary manner.
- 5. The certifying IT will confirm that the instructor candidate has all of the required training materials necessary to teach at this rating.

This note is added 20 Nov. 2008.

6. Note here that all openwater training dives within the scope of the Openwater Sport Diver, Ocean Scuba Diver & Ocean Diver programs must be conducted in water that allows direct vertical access to the surface. Therefore these dives shall not be conducted in underwater caves, inside wrecks or below ice.

OWI Crossover Programs

Instructor Crossover programs are for instructors who are currently certified as an Open Water Instructor with another recognized training agency meeting EUF Level-II standards and wish to become an ANDI OWI.

For any crossover to ANDI OWI to be considered, the applicant must be a current instructor in good standing (equivalent to a EU Level-II Instructor), meeting all ANDI prerequisites including whatever liability insurance requirement stated by the RHQ, and holding at least an OWI rating from an internationally recognized agency. Attendance in an ANDI ICC will be required in all cases. Any questions on this issue should be directed to ANDI HQ.

To become an ANDI OW Instructor the crossover applicant must:

- 1. Be a current, renewed teaching status OW Instructor with a recognized training agency meeting Level-II EU standards.
- 2. Attend an instructor orientation, at the level for which they are applying, conducted by a current Instructor Trainer.
- 3. Successfully pass an instructor exam at the level for which they are applying.
- 4. If the level is skill-orientated, the candidate will be required to demonstrate all the skills expected of a student applying for that level. Skills may be both land and water based.
- 5. Possess an ANDI Oxygen Administration Provider Rating or hold a current equivalency rating from another recognized training agency.
- 6. Possess an ANDI Complete SafeAir® User Rating or hold a current equivalency rating from another recognized training agency.
- 7. The certifying IT will confirm that the instructor candidate has all of the required training materials necessary to teach at this rating.

6.4 SafeAir® Training

SafeAir® Instructor Training

LSU: SafeAir® Sport Diver, previously Limited SafeAir® User - This is a Level 1, user program for Oxygen-Enriched-Air.

CSU: Complete SafeAir® User. This is a Level 2, user program for Oxygen-Enriched-Air.

TSD: Technical SafeAir® Diver. This is a level 3, user program for decompression stop required diving with Oxygen Enriched Air.

SafeAir® Instructor Prerequisites:

- 1. Be a current, renewed teaching status Open Water instructor with a recognized training agency that provides entry level air-based scuba instruction. **OR** for LSI candidates the prerequisite is ANDI ASI.
- 2. Hold a valid certification as a user / diver in the ANDI course for which the instructor level is being sought.
- 3. Crossovers apply as per Instructor Trainer Manual, ANDI Part # 2-512. See below

SafeAir® Instructor Training and Certification:

- 1. Candidates will attend a Instructor Training Course for the level at which they are applying **OR** for qualified candidates attend an "orientation to training" at the level for which they are applying **OR** assist an ANDI Instructor Trainer as staff for an Instructor Training Course.
- 2. Successfully pass the SafeAir® Instructor exam and demonstrate proficiency with the course material at the level for which they are applying.
- 3. The candidate will be required to demonstrate all the skills expected of a student applying for that training level. Candidates holding "Open Water Instructor" certification are exempt from having to perform the open water requirement for SafeAir® Level 1 and 2 only (LSI & CSI).
- 4. Specific training procedures are as per SafeAir® Instructor Trainer Manual, Part # 2-512. Crossovers apply as per SafeAir® Instructor Trainer Manual, Part # 2-512. See below.
- 5. The certifying IT will confirm that the instructor candidate has all of the required training materials necessary to teach at this rating.

SafeAir® Instructor Crossover Programs:

SafeAir® Instructor Crossover programs are for instructors who wish to become an ANDI SafeAir® Instructor and who are already certified to teach an EAN program of a similar nature to the ANDI programs. Example: "Similar nature" refers to "Nitrox Instructor" as being similar to ANDI's LSI. "Advanced Nitrox Instructor" is similar to ANDI's CSI.

The ANDI RHQ will determine which ratings are considered "comparable" to ANDI's.

To become an ANDI SafeAir® instructor the non-ANDI instructor applicant must:

- 1. Be a current, renewed teaching status EAN or technical instructor with an ANDI- recognized training agency. The certification held must be recognized as comparable to the ANDI level applied for.
- 2. Attend an instructor orientation, at the level for which they are applying, conducted by a current Instructor Trainer.
- 3. Successfully pass an instructor exam at the level for which they are applying.
- 4. Register with ANDI's RHQ and comply with the RHQ's requirements for licensing and professional insurance.
- 5. The certifying IT will confirm that the instructor candidate has all of the required training materials necessary to teach at this rating.

6.5 Technical and Specialty Training

Instructor Training and Certification:

1. Candidates will attend an Instructor Training Course certification program at the level for which they are applying.

OR

Attend an "orientation to training" at the level for which they are applying or assist an ANDI Instructor Trainer as staff for an Instructor Training Course (ITC).

- 2. Successfully pass the student and instructor exam and demonstrate proficiency with the course material at the level for which they are applying.
- 3. The candidate will be required to demonstrate all the water-skills expected of a student applying for that training level. Any exemption or deviation from this requirement must be approved by an ANDI ITD and the RHQ.
- **4.** Specific training procedures are as per the course-specific Instructor Procedures outline.
- 5. The certifying IT will confirm that the instructor candidate has all of the required training materials necessary to teach at this rating.

Notes and Requirements on Technical Dive Planning:

1. Pre-Dive planning is one of the most important requirements for safe technical diving. Procedures and dive plans must be consistent through-out the ANDI System. ALL ANDI technical programs (Level 3 and above) must be planned using supplied dives found within the instructor procedures for each individual program or planned using the ANDI Gap DivePlanner software. This dive planning tool closely follows current ANDI philosophy and methodology and its functionality and is under ANDI control. NO OTHER DIVE PLANNING SOFTWARE is acceptable for required dives. The instructor is allowed (and encouraged) to make comparisons with other planning tools (software and tables) in order to clear any questions or misconceptions a student might have about a particular dive planning application. Whenever possible the instructor should install the demo of the ANDI Gap DivePlanner on student machines in order to facilitate hands on planning of all required dives.

It still remains the instructor's responsibility to decide which model and conservatism settings the class will use through-out the program or on a particular dive. **All students** must also use the same bottom and deco gases (within reason). This avoids confusion between team members if an emergency situation arises and greatly simplifies dive planning.

It is not contrary to standards for the instructor and/or other qualified assistants to use a less narcotic mix (for example - Trimix) during supervised dives providing they are qualified for gases and equipment used. An instructor may also use a rebreather during open circuit training providing an instructor rating is held for the rebreather type in use and is qualified at user lever for the gases used. It is the instructor's responsibility to plan the proper bailout gases and quantity (including student's requirements) necessary for safely completing the dives.

Specialty Instructor Crossover Courses

Instructor Crossover Courses are for instructors who can already teach a program of a similar nature to the ANDI programs and who wish to become an ANDI instructor. The ANDI RHQ will determine which ratings are considered "comparable" to ANDI's.

To become an ANDI Instructor the crossover applicant must:

- 1. Be a current, renewed teaching status instructor with an ANDI- recognized training agency. The certification held must be recognized as comparable to the ANDI level applied for.
- 2. Attend an instructor orientation, at the level for which they are applying, conducted by a current Instructor Trainer in accordance with the rating's specific instructor training manual.
- **3.** Successfully pass the standard ANDI student and instructor exam (s) at the level for which they are applying.

- **4.** If the level is skill-orientated, the candidate will be required to demonstrate all the skills expected of a student applying for that level. Skills may be both land and water based.
- 5. The certifying IT will confirm that the instructor candidate has all of the required training materials necessary to teach at this rating.

Rebreather Courses

General

- 1. All L2 Rebreather training is unit specific, this requires that the instructor maintain proficiency on every rebreather that the instructor wishes to teach. In order to maintain *TEACHING STATUS* on a particular rebreather, the instructor **must** maintain unlimited access to **ALL** the rebreathers in question. This means that ownership by the instructor or unlimited access to the specific rebreather through the host facility must be maintained. L3 and L5 rebreather programs are not unit specific.
- 2. On all dives an RBS and a form of PO₂ monitoring is required. Under no circumstances is the instructor or anyone under the instructor's supervision be allowed to conduct an open water dive without adequate bailout and PO₂ monitoring.
- **3.** *ANDI* certified rebreather divers with L3 or L5 rebreather qualifications on one rebreather may request a diver level certification card for another rebreather at the same certification level after the new L2 program has been completed, the L2 certification has been processed, and the student provides proof of 12 dives (not counting training dives) on the new rebreather.
- **4.** For detailed rebreather specific limits and requirements, please consult the appropriate instructor procedures.

Level 2 Specific:

- 1. Maximum Depth is 30m/100fsw with No-Stop-Required profiles using AIR/SafeAir as the diluent, Maximum normal working PO₂ is 1.45ata. If the rebreather is equipped with quick disconnects for either diluent or oxygen addition, the RBS should be fitted with a compatible whip to allow easy connection and addition of off-board gas.
- 2. ANDI certified Level 5 Open Circuit divers may use a normoxic Trimix as a diluent after attaining 25 hours on the specific rebreather providing the profiles remain as NO STOP REQUIRED with a 40m/130fsw maximum depth.

3. During L2 unit specific training:

Maximum Depth is 30m/100fsw with No Stop Required profiles using AIR/SafeAir as the diluent, Maximum normal working PO₂ is 1.45ata

It is ANDI's position that the instructor should be using the same rebreather as the student whenever possible. ANDI recognizes this may be prevented by law and other logistical reasons such as renting the facility or instructor's rebreather to the student, or traveling abroad with students for several different rebreathers.

The instructor may use rebreathers similar in nature to the rebreather being taught. This means a rebreather with similar or same loop components, function, and/or electronics. Differences such as loop direction, are not visible by the student and would not necessarily disqualify the use of a specific rebreather.

The instructor is prohibited from using any rebreather where the *normal* operation would lead to student confusion and incorrect use of his/her rebreather. Minor *operational* differences such as a using a different brand computer/controller, or different DSV design that uses another method to open and close would not be considered incompatible because design differences would prohibit the student from copying such actions.

An example of an incompatible arrangement would be 2 rebreathers that have manual diluent addition valves on opposite sides of the rig. A possible situation is that the instructor's manual diluent addition is positioned on his/her right side, while the student's manual diluent addition valve is on positioned on student's left side. This scenario may lead to some confusion by the student because the instructor would be observed repeatedly pressing the manual addition valve on his/her right side while descending. A student copying these actions would be adding Oxygen instead of diluent, and raising the PO₂ beyond anticipated levels. Request clarification with ANDI HQ if necessary.

Bailout systems must be compatible between the students and the instructor.

Level 3 Specific:

1. These divers are certified on their particular equipment system and should be familiar with the operation of the unit, the instructor should be familiar with the student's rebreather but does not have to be an instructor on the particular unit. All the members of the team do not have to be using the same rebreathers but all bailout systems in use must be compatible between all team members.

- 2. TRD (Technical Rebreather Diver) has a maximum depth of 40m/165fsw with 30 minutes maximum required stop time.
 - TTR (Technical Trimix Rebreather Diver) has a maximum depth of 40m/165fsw with 45 minutes maximum required stop time.
- **3.** *ANDI* certified Level 5 Open Circuit divers may use a normoxic Trimix diluent during a Technical Rebreather Diver / Technical Trimix Rebreather program provided ALL other team members are using the same diluent and bailout gases. Upon completion of the required dives for TRD and at the instructor's discretion may be certified as a TTR.
- 4. All dives with required decompression must be planned with a minimum of 1.5 times the gas needed to get the diver with the worse open circuit gas consumption to safety. During training each team member must be carrying a mix that is breathable at the maximum depth and a decompression mix. These bailout cylinders must be equipped such that they can be used as an off-board gas source for the all the rebreathers in use. Rebreathers that are not equipped as standard to accept an off-board gas source should be modified (within reason) to accept an off-board gas source. During the supervision of certified L3 divers, technical divemasters and technical instructors should insure all divers are carrying an appropriate bottom bailout mix and that the team is carrying enough bailout gas to get 1.5 divers to safety or to additional support.

Level 5 Specific:

- 1. These divers are certified on their particular equipment system and should be familiar with the operation of the unit, the instructor should be familiar with the student's rebreather but does not have to be an instructor on the particular unit. All the members of the team do not have to be using the same rebreathers but all bailout systems in use must be compatible between all team members.
- 2. CCE (Tri-Mix Rebreather Diver) 80m maximum depth during training (may be reduced by manufacturer limits) with no limits on runtime. Limits for certified divers are limited by diver experience and available technical support.
- 3. All dives with required decompression must be planned with a minimum of 1.5 times the gas needed to get the diver with the worse open circuit gas consumption to safety. During training each team member must be carrying a mix that is breathable at the maximum depth and a decompression mix. These bailout cylinders must be equipped such that they can be used as an off-board gas source for the all the rebreathers in use. Rebreathers that are not equipped as standard to accept an off-board gas source should be modified (within reason) to accept an off-board gas source. During the supervision of certified L5 divers, technical divemasters and technical instructors should insure all divers are carrying an appropriate bottom bailout mix and that the team is carrying enough bailout gas to get 1.5 divers to safety or to additional support.

6.6 Course-specific Training Standards

See the Training Standards Overview charts that follow. For the specific information regarding each courses see the document files named "X X X proc". Each file contains the 3-letter course code as the prefix: i.e. **SWDproc.pdf** (SafeAir® Wreck Diver Procedures).

All course-specific procedures are available from your RHQ or ANDI IHQ at no charge. IT's and Instructors will refer to the standard format ANDI document entitled, "*Instructor Procedures*". The Instructor Procedures will contain the course overview and list the necessary documents and procedures specific to the course. This course overview is contained in all instructor teaching manuals within the ANDI system.

It is the responsibility of **both** the instructor (or IT) and the Facility to maintain a current library of the course standards for those courses that they conduct.

6.7 Training Standards Overview

See the charts on the following pages.

6.8 Educational Flow Charts

See the charts following the Training Standards Overview Charts.



Training Standards Overview

Comparison of Course Standards Effective March 16, 2008



Training Standards Overview

(Openwater Sport Diver & Junior Programs)

Standards	Surface Diver	Confined Environment Diver	Junior OW Sport Diver ¹	Openwater Sport Diver ¹	Advanced Openwater Sport Diver ¹
Age Limit	4 - 8 years	8 - 12 years	12 - 16 years	16 +	16 +
Max. Course Depth	N/A	20 fsw	50 fsw	60 fsw	100 fsw
Min. Course Depth	N/A	6 fsw	20 fsw	30 fsw	50 fsw
Min. Dive Depth for Certification	- N/A		12 fsw	20 fsw	30 fsw
Theory Time	1 hour	10 hours incl. exams & evaluation	16 hours incl. exams & evaluation	16 hours incl. exams & evaluation	CSU + 3 selected specialties
# of OW Dives	Not permitted		5*	5* ²	10*
Confined Env. Time	N/A 12 - 16 hrs		12 - 16 hrs	12 - 16 hrs	optional
OW Bottom Time	N/A		80 min	80 min	200 min
OW Run Time	N/A		100 min.	100 min.	240 min.
In-water Training Supervision	ASI + CDM per 4	OWI per 4 + 4 with ASI	OWI per 4 + 4 with ASI	OWI per 4 + 4 with ASI	OWI per 4 + 4 with ASI
Certification Depth Limit	N/A	20 fsw	57 fsw	100 fsw ²	130 fsw
Required Buddy	none	Parent / Legal Guardian or ASI	Parent /Legal Guardian or family member 18+ yrs	OWD	OWD

^{1 -} Courses may be conducted with Air or SafeAir * see the instructor procedures for the specifics for the dives . Note that Junior ratings are offered for LSU, CSU, OWD and AOW.

Effective September 2008

²⁻ With only 5-dives certification good to 60 fsw (18 m) however with an optional 6th dive and or additional training/experience with an instructor this limit can be changed to 100 fsw (30 m).



Training Standards Overview

(Sport Diving Training Programs)

Current USA course pricing*	\$495	\$395	\$195	\$295	
Standard	Open Water Diver OWD L1	Advanced Open Water AOW L2	SafeAir Sport Diver LSU L1	Complete SafeAir User CSU L2	
Age Limit	16+ ¹	16 + ¹	12+	16+ ¹	
Max. Course Depth	18 m	30 m	30 m	40 m	
Min. Course Depth	9 m	20 m	10 m	15 m	
Max. Deco	None	None	N /A	None	
Max. PO ₂ for Deco	N /A	N /A	N /A	N /A	
Gas Limits - Oxygen	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	
Gas Limits - Nitrogen	3.2 PN ₂	3.6 PN ₂	3.2 PN ₂	3.6 PN ₂	
Theory Time	14 - 16 Hrs	8 - 12 Hrs	5 - 6 Hrs	10 - 12 Hrs	
Confined Environment Time	12 -16 Hrs	optional	N /A	N /A	
# of Dives	5* ⁴	6*	2*	2*	
Min. Bottom Time	80 min	200 min	50 min	50 min	
Min. Run Time incl Safety Stops	100 min	240 min	60 min	60 min	
Certification Depth Limit	100 fsw ⁴ 30 msw	130 fsw 40 msw	100 fsw ² 30 msw	130 fsw ² 40 msw	
Prerequisites ³	None	OWD + 10 dives	diver in training	OW certified	

^{1 -} Junior rating available for 12 + * see the instructor procedures for the specifics for the dives 2 - based upon issuing agency OWD stds & gas limits 3 - other prerequisites may apply 4-With only 5-dives certification good to 60 fsw (18 m) however with an optional 6th dive and or additional training/experience with an instructor this limit can be changed to 100 fsw (30 m). Effective date - Nov 2009



Training Standards Overview

(SafeAir Training Programs)

Current USA course pricing*	\$195	\$295	\$395	\$139	\$595
Standard	LSU L1	CSU L2	SWD L2	CCI L1	SCR L2
Age Limit	16+ ¹	16+ ¹	16+	16+	16+
Max. Course Depth*	30 m	40 m	40 m	10 or 18m ⁵	30 m
Min. Course Depth	9 m	15 m	15 m	6 m	10 m
Max Deco	N/A	N/A	N/A	N/A	N/A
Max PO ₂ Deco	N/A	N/A	N/A	N/A	N/A
Gas Limits - Oxygen	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Gas Limits - Nitrogen	3.2 PN ₂	3.6 PN ₂	3.6 PN ₂	3.2 PN ₂	3.6 PN ₂
Theory Time	5 - 6 Hrs	10 - 12 Hrs	6 - 8 Hrs	2 Hrs	20 Hrs ²
# of Dives	2*	2*	4*	1*	6*
Min. Bottom Time	50 min	50 min	100 min	30 min	180 min
Min. Run Time incl Safety Stops	62 min	62 min	125 min	35 min	216 min
Certification Depth Limit	100 fsw ⁴ 30 msw	130 fsw ⁴ 40 msw	130 fsw 40 msw	65 fsw 20 msw	130 fsw 40 msw
Prerequisites	diver in training	OW certified	CSU ³ + 20 dives or AOW	OW certified	CSU ³ + 20 dives or AOW

^{*} see the instructor procedures for the specifics for the dives 1 - Junior rating available for 12 +

Effective date -Oct 2009

^{2 -} includes CSU lectures 3 - other prereq's may apply 4 - based upon issuing agency OWD stds & gas limits

^{5 -} Max depth of 18 m ONLY IF Confined Water practice is provided otherwise 10 m maximum

^{*} The cost of the water fees not included, i.e. Quarry entrance fee, Boat ticket, beach pass etc.



Training Standards Overview

(Technical Training Programs)

	Technical	Technical	Extended	Intermediate	Tri-Mix Diver
Standard	SafeAir Diver	Tri-Mix Diver	Range Diver	Tri-Mix Diver	
	TSD L3	TTM L3	ERD L4	ITM L5	TMD L5
Maximum Course Depth 1	40 m	40 m	50m (49.5m)	60 m	80 m
Minimum Course Depth ²	30 m	30 m	40 m	50 m	60 m
Min. Dive Depth for	•	20	20	40	= 0
Certification Credit ³	21 m	30 m	30 m	40 m	50 m
Max. Deco Run-time 4	30 min	45 min	As Required	As Required	As Required
Max. PO ₂ for Deco	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂
Bottom Gas Limits - O ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Bottom Gas Limits - N ₂	3.6 PN ₂	3.6 PN ₂	4.5 PN ₂	3.6 PN ₂	3.6 PN ₂
Bottom Gas Limits - Helium	none	16% or more	none	16% or more	As Required
Theory Time	14 - 16 Hrs	4-6 Hrs ⁵	6 - 8 Hrs	5 - 7 Hrs ⁵	5 - 7 Hrs
# of Dives	4 * ⁷	4 *7	4 * ⁷	4 * ⁷	4 * ⁷
Min. Bottom Time	80 min	100 min	120 min	75 min	75 min
Min. Run Time	120 min	180 min	240 min	240 min	240 min
Equipment configuration	3 cylinders	3 cylinders	4 D : 3	4 D : 1	4 D : 1
limitations	3 gases	2 gases	As Required	As Required	As Required
D 6	CSU		TSD	ERD	ERD
Prerequisites ⁶	+50 dives	TSD	+100 dives	+200 dives	+200 dives

- 1 The deepest dive permitted during training. 2 At least one training dive must meet this minimum.
- 3 Other than the first evaluation dive no shallower dive may be credited toward certification.
- 4 One deco cylinder must cover all stops and bailout.
- 5 Includes all TMD info from L5 course.
- 6 Other prereq's may appl at instructor discretion
- 7 ANDI GAP software is to be utilized for generation of ALL course profiles for Level-III and higher.

Note that divers may only move 2 levels during one course series. In order to move 3 levels the candidate must have 25 dives at the ERD level.

^{*} see the instructor procedures for the specifics for the dives Effective October 2009



Technical Training Programs, Level 3 Only - Standards Overview

Current USA course pricing* \$495 \$495 \$795 \$625

Current OBA course pricing	, ψ τ /Ο	ΨΤΖΟ	ΨΙΙΟ	Ψ023
Standard	Technical SafeAir Diver TSD - L3	Technical Wreck Diver TWD - L3	Technical Rebreather Diver TRD - L3	Technical Tri-Mix Diver TTM - L3
Max. Course Depth 1	40 m	40 m	40 m	40 m
Min. Course Depth ²	30 m	20 m	30 m	30 m
Min. Dive Depth for Certification Credit ³	21 m	18 m	18 m	30 m
Max. Deco Run-time 4	30 min	30 min	30 min	45 min
Max. PO ₂ Deco	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂
Bottom Gas Limits - O ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Bottom Gas Limits - N ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂	3.2 PN ₂
Bottom Gas Limits - He	N/A	N/A	N/A	16% Minimum
Theory Time	14 - 16 Hrs	6-8 Hrs	16 Hrs	4-6 Hrs ⁵
# of Dives	4 * ⁷	5* ⁷	4* ⁷	4 * ⁷
Min. Bottom Time	80 min	125 min	120 min	100 min
Min. Run Time	120 min	180 min	180 min	180 min
Equipment configuration limitations	3 cylinders 3 gases	3 cylinders 3 gases	Bailout Required	3 cylinders 2 gases
Prerequisites ⁶	CSU +50 dives	TSD	SCR /CCR + TSD+ pretest + 25 rebreather dives/25 hrs	TSD

- 1 The deepest dive permitted during training. 2 At least one training dive must meet this minimum.
- 3 Other than the first evaluation dive no shallower dive may be credited toward certification.
- 4 One deco cylinder must cover all stops and bailout.
- 5 Includes all TMD info from L5 course.
- 6 Other prereq's may appl at instructor discretion
- 7 ANDI GAP software is to be utilized for generation of ALL course profiles for Level-III and higher.

^{*} see the instructor procedures for the specifics for the dives Effective Oct 2009

^{*}The cost of the gas & water fees are not included, i.e. quarry entrance fee, boat ticket or beach pass. Note that divers may only move 2 levels during one technical course series. In order to move 3 levels the candidate must have 25 dives at the ERD level.



Training Standards Overview

(Rebreather Training Programs)

Current USA course prici	ng* \$139	\$595	\$595	\$1595	\$795	\$1595
Standard	CCI L1	SCR L1	SCR L2	CCR L2	TRD L3	CCE / ERE L5 ⁴
Max. Course Depth	10 or 18 m ⁶	20 m	30 m	30 m	40 m	80 m
Min. Course Depth	6 m	10 m	10 m	10 m	30 m	60 m
Max Deco	N/A	N/A	N/A	N/A	30 min	As Req'red
Max PO ₂ Deco	N/A	N/A	N/A	N/A	1.6 PO ₂	1.6 PO ₂
Gas Limits - O ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Gas Limits - N ₂	3.2 PN ₂	3.2 PN ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂
Min. Theory Time	2 Hrs	8 Hrs + 1 pool dive	16 Hrs	16 Hrs	16 Hrs	30 Hrs ^{2,7}
# of Dives	1*5	2*5	2 pool dives 4-6*5	2 pool dives 6-8* ³ OW	4-8* 5,7	6-10 ^{5,7}
Min. CE Water Time	optional	120 min	120 min	120 min	optional	optional
Min. OW Bottom Time	30 min	100 min	180 min	300 min	120 min	120 min
Min. Run Time	N/A	N/A	N/A	N/A	180 min	240 min
Prerequisites ³	OW certified	OWD + LSU + 10 prior OW dives	CSU + 20 dives or AOW	OWD+CSU* +50 prior OW dives	SCR /CCR +TSD ⁷ + pretest + 25 rebreather dives/25 hrs	TMD ⁷ + TRD +200 prior OW dives + 50 rebreather dives/75 hrs

^{*} see the instructor procedures for the specifics for the dives other prereq's may apply

The cost of the water fees is not included, i.e. quarry entrance fee, boat ticket, beach pass etc.

Rebreather, breathing gas, scrubber chemicals, cylinder and equipment rentals are usually not included in the training fees. Ask your ANDI facility for course details.

Effective October 2009

^{1 -} includes CSU lectures 2 - includes ERD & CCR and TMD lectures if not TMD certified

^{3 -}All rebreather courses are unit specific - times or dives may vary 4 - Certification available for CCRs only

^{5 -} ANDI-Gap software is to be utilized for generation of ALL course profiles for Level-III and higher.

⁶⁻ Max depth of 18 m ONLY IF Confined Water practice is provided otherwise 10 m maximum 7- TSD and TRD or TMD and CCE may be combined into a single program with all dive performed on a RB, additional fees will apply



Training Standards Overview

(Rebreather Instructor Training Programs)

Current USA course prio	cing* \$795	\$795	\$995	\$1595
Standard	RBI L2 for SCR	RBI L2 for CCR	TRI L3 for TRD	XRI L5 for CCE / ERE
Max. Course Depth	40 m	40 m	40 m	80 m
Min. Course Depth	10 m	10 m	40 m	60 m
Max Deco	N/A	N/A	30 min	As Required
Max PO ₂ Deco	N/A	N/A	1.6 PO ₂	1.6 PO ₂
Gas Limits - O ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Gas Limits - N ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂
Theory Time	10 Hrs¹ incl 2 hrs pool	10 Hrs¹ incl 2 hrs pool	6 Hrs³	12 Hrs ²
# of OW Dives	4*	4*	4* ⁵	4 * ⁵
Min. Bottom Time	150 min	150 min	180 min	100 min
Min. Run Time	N/A	N/A	210 min	270 min
Prerequisites ⁴	CSI + SCR + 25 dives on the specific rebreather + 50 hrs of rebreather experience	CSI + CCR + 25 dives on the specific rebreather + 100 hrs of rebreather experience	RBI + TSD Instructor lectures + TRD + 100 hrs of rebreather experience	TRI + ERD+TMD Instructor lectures + CCE + 100 hrs rebreather experience

^{*} see the instructor procedures for the specifics for the dives

Oct 2009

^{1 -} plus the SCR / CCR lectures 2 - includes ERD & TMD lectures 3 - includes TSD lectures 4 - other prerequisites may apply - the times listed are considered minimums

^{5 -} ANDI GAP software is to be utilized for generation of ALL course profiles for Level-III and higher.



Training Standards Overview

(SafeAir & Technical Instructor Training Programs)

Current USA course pi	ricing* \$295	\$395	\$995	\$ 995	\$ 995
Standards	LSI L1	CSI L2	TSI L3	ERI L4	TMI L5
Max. Course Depth	30 m	40 m	40 m	40 m	100 m
Min. Course Depth	10 m	10 m	40 m	40 m	60 m
Max Deco	N/A	N/A	30 min	as req'd	as req'd
Max PO ₂ Deco	N/A	N/A	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂
Gas Limits - O ₂	dives waived	dives waived	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Gas Limits - N ₂	dives waived	dives waived	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂
Theory Time	10 Hrs incl exams& evaluation	16 Hrs incl exams& evaluation	8 Hrs incl exams& evaluation	8 Hrs incl exams& evaluation	8 Hrs incl exams& evaluation
# of OW Dives	dives waived for this rating		4* 3	4 * ³	4* ³
Min. Bottom Time	N/A		120 min	150 min	80 min
Min. Run Time	N/A		180 min	240 min	240 min
Prerequisites ²	CSU + AI or equivalent	CSU + OWI or equivalent	TSD+CSI + 100 dives + 10 deeper than 30m	ERD+TSI +150 dives +50 deco dives + 6 TSD courses	TMD+ERI +300 dives +100 deco dives + 6 ERD courses

^{*} see the diver rating for the specific procedures for the dives .

Effective Oct 2009

^{2 -} other prerequisites may apply as per the conducting IT. The bottom times listed are considered minimums

^{3 -} ANDI GAP software is to be utilized for generation of ALL course profiles for Level-III and higher.



Training Standards Overview

(Cavern & Cave Diver Training Programs)

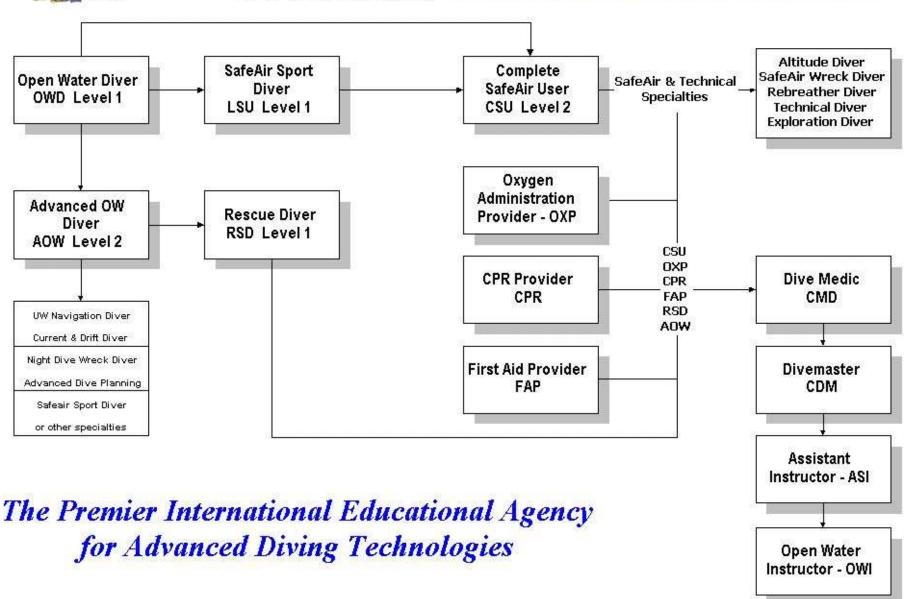
Standards	CVN L2	CAV L3 CAR L3 ⁴	CVX L4 CVR L4	CVX L5 CRX L5
Max. Course Depth	30 m	40 m	40 m	50 m
Min. Course Depth	10 m	18 m	30 m	30 m
Max Deco	N/A	30 min	as req'd	as req'd
Max PO ₂ Deco	N/A	1.6 PO ₂	1.6 PO ₂	1.6 PO ₂
Gas Limits - Oxygen	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂	1.45 PO ₂
Gas Limits - N ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂	3.6 PN ₂
Theory Time	6-8 Hrs incl exams& evaluation	10 Hrs incl exams& evaluation	8 Hrs incl exams& evaluation	8 Hrs incl exams& evaluation
# of OW Dives	4 1,3	10 ³	6 3	63
Min. Bottom Time	140 min	400 min	240 min	240 min
Min. Run Time	160 min	500 min	360 min	360 min
Prerequisites ²	CSU + AOW or equivalent	CVN + TSD or equivalent	CAV + ERD + 100 dives + 10 deeper than 30 m 25 Cave Dives	CAV + TMD +200 dives + 50 deco dives + 50 Cave Dives
Instructor requirements		The instructor need not be an instructor on the students CCR but must hold certification as L3 diver on all student's CCR's		

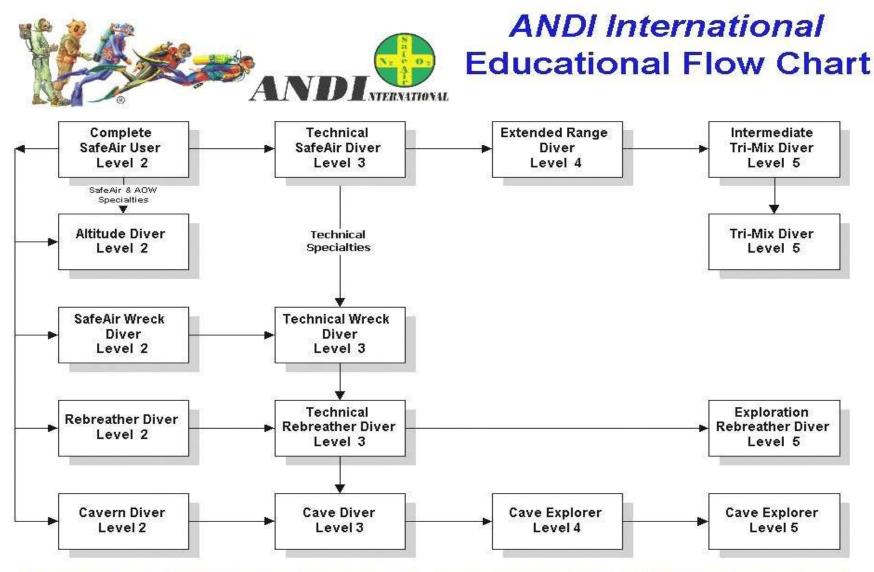
- 1 Four dives in two different caverns
- 2 other prerequisites may apply as per the Instructor
- 3 ANDI GAP software is to be utilized for generation of ALL course profiles for Level-III and higher. all bottom times and # of dives listed are considered minimums
- 4 Student must hold L3 certification on the specific rebreather being used during the course

Effective Oct 2009



ANDI International Educational Flow Chart





The Premier International Educational Agency for Advanced Diving Technologies

Section 7 Administrative Requirements

7.1 Medical Questionnaire and History

For each ANDI course requiring in-water skill evaluation, the student must complete the medical history statement use for their entry-level scuba training and the ANDI instructor is required to comply with the standards associated with that medical history statement. In locations where local regulations/guidelines are in place, the local regulations/guidelines must be followed in addition to completing the medical history statement. The medical history statement should be kept on file at the ANDI training facility for a period of seven years. ANDI IHQ has an approved form in English language available as a separate document. Check with the RHQ for local guidelines.

The standard "Medical Questionnaire" form is included in the Appendix and is also included as part of the Student Data Folder, ANDI Part # 5-115

7.2 Liability Release

To protect the ANDI Instructor, ANDI Training Facility and the RHQ every student must complete the ANDI form entitled, "Liability Release and Expressed Assumption of Risk". This form is to be presented in the students' native language and must be signed by every student prior to participation in any in-water activities.

ANDI Professional Liability insurance is only in effect for those students having completed and signed the release form.

ANDI IHQ has an approved form in English language available as a separate document. Check with the RHQ for local guidelines.

The standard "Liability Release and Expressed Assumption of Risk" form is included in the Appendix and is also included as part of the Student Data Folder, ANDI Part # 5-115

7.3 Training Records

Records of course completion and training are to be kept for at least 7 years, or as specified by local requirements. Check with the RHQ for local guidelines. It is suggested that the Student Data Folder, ANDI Part # 5-115 be used to facilitate the storage of student records.

7.4 Certification

- 1. Students must demonstrate acceptable performance for all course objectives before the date of certification and dispatch of certification request to ANDI.
- 2. The ANDI Training Facility who is in supervision of the student when the student completes the initial course objectives is to be the certifying facility (Part 1 Provider). The responsibility for student competence is shared equally between the Part 1 and Part 2 instructors.

The certification process is complicated by the referral process which should *logically* list the instructor that completes the course objectives as the certifying instructor. This is not supportive of the ANDI Training Facility that recruited and initiated the training as their name would not appear on the ANDI certification card. The initiating ANDI Training Facility and the Part 2 Instructor are named on the certification card.

- 3. The certifying instructor is to ensure that all course objectives have been met by the student irrespective of whether or not the certifying instructor personally conducted all phases of the course.
- 4. It is the responsibility of the certifying instructor to ensure that a completed student registration form is sent to ANDI within 7 days of the course completion date unless delays are caused by the student. Any explanation of delays caused by the student should accompany late student registrations. It is recommended that the instructor send written notification to the student detailing the reason for the delay in awarding certification.
- 5. Prerequisite Age requirements: Each certification has limitations specific to it's ratings. Therefore, the age limits will vary according to the individual certification. Refer to the course-specific *Instructor Procedures* for each course.

ANDI **STANDARDS** require that each candidate be an Open Water certified diver prior to entering a SafeAir training course, for training Level Two and above.

SafeAir Sport Diver L1: Any certified diver or diver in training. **Complete SafeAir User L2**: All "Open Water certified" divers are eligible for this program. Matching the limits of their OW rating, Junior ratings may be issued for this rating.

Note: Junior certifications are limited to participation in the Level 1 & 2 programs only.

Technical SafeAir Diver: "Open Water certified" divers, 18 years and older, are eligible for this program.

All Level 4 and Level 5 programs: "Open Water certified" divers, 18 years and older, with legal adult status are eligible for this program.

ANDI standards and recommendations are modified and updated when deemed necessary by ANDI. It is the responsibility of the ANDI facility and instructor to maintain current copies of all standards and recommendations.

Section 8 ANDI Facility Standards

8.1 The ANDI Training Facility

A professional retail business offering as its primary activity SCUBA training and equipment sales. The image of the facility must demonstrate a familiarity with the procedures for producing high-quality breathing gases and a dedication to the education of the diving public utilizing the ANDI system.

Prerequisites

Applicants for ANDI Training Facility status must meet the following criteria:

- 1. Be a retail store offering entry level SCUBA training and SCUBA equipment sales and service.
- 2. Have a store front indicating that SCUBA activities are the primary business. Present the business, at the minimum, to a standard consistent with the area's retail community.
- **3.** Operate within posted business hours that are appropriate for retail businesses in the area. The business is to be considered a "full time" business.
- **4.** Offer retail sales of breathing gasses through on-site production.

8.2 Requirements for "Licensed Membership"

To be eligible for "Licensed Membership" as a new or renewed ANDI Training Facility, the facility must conform to the following ANDI standards.

- 1. All ANDI certified facility staff must agree to adhere to all ANDI standards as listed in the document titled "General Course Standards". All equipment handling guidelines are to be followed by the facility staff.
- 2. The facility owner and staff must sign the ANDI dealer / membership agreement and submit appropriate membership license fees to ANDI Regional Headquarters. This document is to be resigned annually and must be on file at ANDI Regional HQ.
- **3.** ANDI educational materials and facility membership / license must be displayed prominently in the place of business.
- 4. The facility must maintain an ANDI certified support staff consisting of at least one each Instructor, Service Technician and Gas Blender unless an exemption is granted by the regional headquarters. The staff must maintain current license and Teaching Status.
- 5. The facility must offer regularly-scheduled ANDI training programs up to the level to which the ANDI Instructor staff is certified. ANDI Instructors are required to renew their license annually. Local liability insurance regulations apply. However, all instructors must have a policy that indemnifies ANDI or lists ANDI as an additional insured. Their insurance coverage must specifically cover ANDI course guidelines and activities. This proof of coverage must be forwarded to ANDI Regional HQ at the time of instructor licensing and renewal.
- 6. The facility will provide "SafeAir® Service" and "Oxygen Service" equipment, serviced only by ANDI certified technicians and in accordance with both ANDI and the specific equipment manufacturer's recommendations.
- 7. The facility will blend gas mixtures and handle oxygen utilizing only *ANDI*-certified Gas Blenders.
- 8. If only pre-mix SafeAir is purchased, no ANDI gas blender is required, however the facility must have on-site an ANDI-approved SafeAir® gas dispensing system. Gas production may be completed off-site. Gas production must meet ANDI standards and a sketch of the gas system should be forwarded to regional HQ with the original membership agreement.
- 9. All *ANDI* facilities must have their SafeAir production gas (*that which is produced on-site*) analyzed periodically in accordance with the RHQ standards. Within the USA, quarterly analysis is required. A copy of the report sent to regional HQ. The *ANDI* gas standard

required is "Oxygen Compatible Air" as specified in the documents entitled "General Course Standards" or "User Standards".

- 10. Quarterly analysis must be performed on the SafeAir production gas by an approved testing lab and a copy of the report must be forwarded to *ANDI* Regional HQ. The facility must display the last quarterly analysis report in the gas dispensing area. *ANDI* offers a group plan for gas analysis. The analysis reports are due at *ANDI* USA Regional HQ at the time of facility licensing and/or on the first day of January, April, July and October of each year.
- 11. Should SafeAir rental/hire equipment be offered in addition to "air service only", that hire / rental inventory of cylinders, valves, breathing systems including "Redundant Breathing Systems" and instrumentation are required to be dedicated to SafeAir® service. If all gas dispensed is "Oxygen Compatible" no special handling is required.
- 12. All facilities must agree to follow standard industry business practices appropriate for a professional SCUBA center. These practices are not limited to but are identified by the following procedures:
 - a) Agree to refill only cylinders that meet current local inspection standards.
 - b) Provide "Air Only" SCUBA services only to those individuals capable of providing proof of "Air Only" SCUBA training
 - c) Provide gases and services for other than air, only to those individuals capable of providing proof of training in optimal breathing gas technology and only to the level of their certification.
- **13.** Demonstrate compliance to *ANDI*'s ethical standards.
- **14.** Demonstrate a business attitude consistent with *ANDI*'s philosophy of maintaining the value of *ANDI* products and services and a cooperative attitude toward other *ANDI* facilities. The retail prices of *ANDI* training programs must be approved by the RHQ in order to maintain the value of our facilities efforts.
- **15.** *ANDI* Training Facilities must maintain an account in good standing with the RHQ. Non-payment for goods and services and invoices 90 days past due are a condition for non-renewal as is any other non-compliance with the aforementioned terms and conditions of membership.
- **ANDI** Training Facilities must perform all service work on-site or utilize an ANDI-approved service center. Facility staff must affix all quality assurance items and compatibility designation items. i.e. cylinder inspection decals, cylinder wrap decals, designation sleeves and stickers. Training facilities may only trans-ship these items to other licensed *ANDI* facilities.

8.3 Licensed Member Status

Licensed Membership will be awarded after compliance with the above required conditions.

Membership renewal is based upon continued compliance.

Membership duration is from January 1 to December 31 of each year. Applications for membership approved within a year's last quarter (beginning October 1) will include membership for the following year at no additional fee.

Facility Membership fees are determined by the RHQ.

Licensed Membership may also be based upon local conditions and requirements. The RHQ may make additions or deletions with the approval of *ANDI* HQ.

APPENDIX

Note: The forms below are also available separately by request from $ANDI\ \mathbf{HQ}$ or the local RHQ.



Standards Waiver Request

MEMBER INFORMATION	(Please Print)				
Name	ANDI Rating & #				
Mailing Address					
City	State / Island				
Postal Code Country _	E-mail				
Daytime Telephone	Evening Telephone				
STANDARD DESCRIPTION					
Training Program	Requested Date of Change				
Instructor Manual / Procedures Name _	Page #				
Quote the Standard					
Duration of waiver	OR □ Request permanent change to Stds.				
REASON FOR WAIVER					

AMERICAN NITROX DIVERS INTERNATIONAL, LTD.

dba ANDI International

LIABILITY RELEASE AND EXPRESS ASSUMPTION OF THE RISK THIS IS A RELEASE OF YOUR RIGHTS TO SUE

This liability release may be used as evidence in a court of law if you decide ${\bf r}$	
Please read this document carefully and fill in all the blanks, initial and sign	in the appropriate spaces provided.
I,(student name) hereby agree that I have	been fully advised and completely
informed of the inherent risks and hazards associated with SCUBA diving a	
gases, including Air, Enriched Air Nitrox/SafeAir®, Tri-Mix and Heli-ox.	-
(initials) I, further, completely understand that diving with compre	essed air gases such as those listed in
the paragraph above involve certain inherent risks and hazards to include: d	ecompression illness, lung expansion
injuries, arterial gas embolism and the associated decompression sickness n	naladies. These maladies may result
in permanent injury or death. I, further, completely understand that by exc	eeding oxygen tolerance levels I may
be subjected to central nervous system type or whole body oxygen toxicity	and that these, among other things,
could lead to severe injuries, paralysis or even death. By evidence of my sig	
I evidence that I have been fully appraised of the risks and hazards associ	- -
contemplating and I expressly assume these risks. I, further fully understand	-
for this activity may be conducted in point of time and distance in a remote le	=
aid, rescue and recompression chamber facilities. Nevertheless, I still choose the state of the	
dives despite the possible lack of recompression or medical facilities to assist	st me snouid i become injured.
(initials) I fully understand and agree that neither my instructor(s)	,
(instructor's names), nor the ANDI	International facility through
which I receive my instruction,	(facility name), nor the ANDI
$International \ \ headquarters, nor any of their respective employees, of fine the property of their respective employees and the property of their respective employees. The property of $	cers, agents or assigns, may be held
liable or responsible in any fashion for any injury, death or damages to me or	my family, heirs or assigns that may
occur as a result of my participation in this $ANDI \ International \ {\it divin}$	g course of instruction or as a result
of active or passive negligence of any party including the released parties n	amed in this document.
(initials) In exchange for me being allowed to enroll and participa	ate in this ANDI International
program of instruction I hereby personally assume all risks in conjunction	
harm or injury or damages that may befall me, my heirs or assigns while I an	
I specifically assume all risks associated with my participation in this cours	
unforeseen.	
(initials) In consideration for my participation in this course of instr	ruction I save and hold harmless and
agree to indemnify my instructors, the ANDI International facility to	which I am receiving my instruction,
and ANDI International headquarters of any claim or lawsuit brought	by me, my family, my estate, my heirs
or assigns arising out of or in connection or in conjunction with my enrollm	ent and participation in this $\stackrel{.}{ANDI}$
$International\ {f program\ of\ instruction\ including\ both\ claims\ arising\ during both\ claims\ arising\ during\ during\$	ing the course of instruction or after
I have received my certification.	

AMERICAN NITROX DIVERS INTERNATIONAL, LTD.

dba ANDI International

LIABILITY RELEASE AND EXPRESS ASSUMPTION OF THE RISK THIS IS A RELEASE OF YOUR RIGHTS TO SUE

specialized training and that this particular understand that I will be physically exerting to of a heart attack, failure to control my panic	r course of instruction offered to me is technical in nature. I also myself during this course and that should I become injured as a result, failure to control my breathing and hyperventilation, I specifically I expressly agree to in exchange for my participation in this course in this document responsible.
and understand the contents of this liability sue. I agree to the terms and conditions of thi	re on this document, I evidence that I have fully read, contemplated, release and express assumption of the risk, and release my right to s document in exchange for my participation in this course. I further petent to sign this release or that I have acquired the specific written
(initials) I understand that this docu	ment constitutes a contract between myself and the released parties
It is the express intention of	(student name) by this instrument to release my
instructor(s)(instructor's name), the facility through which I received my
headquarters from all liability and responsib	(facility name) and the ANDI International regional bility whatsoever for personal injury, property damage or wrongful mited to, the negligence, active or passive, of the released parties.
Student Signature	Date
Signature of Parent or Guardian (if under the age of 21)	Date

American Nitrox Divers International, Ltd.

dba ANDI International
74 Woodcleft Ave.

Freeport, NY, USA 11520

Tel (516) 546-2026

Fax (516) 546-6010





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INCIDENT REPORT FORM

INVOLVED PARTY INFORMATION (Please type or print clearly.) Mailing Address _____ State/Province _____ City_ Zip/Postal Code _____ Country _____ Female Next of Kin _____ Relationship _____ Phone (_____) Contacted Yes No INVOLVED PARTY CERTIFICATION(S) If previously certified, what level? _____ Date of Certification _____ Agency _____ Number Instructor Name (Attach a separate sheet of paper if necessary.) If the involved party was receiving instruction please provide: Dive Number and Skill _____ Level of Training ___ INCIDENT CLASSIFICATION (Check all that apply.) Nonscuba Related ☐ Noninjury ☐ Class/Store ☐ Swimming ☐ Skin Diving ☐ Boat (for office use) □ Noninjury □ Pool/Confined Water □ Open Water □ Commercial Scuba Related Type of Incident/Injury/Illness _____ ☐ Equipment Failure ☐ Diving Ascent ☐ Out of Air ☐ Entrapment ☐ Decompression Related ☐ Weight Belt Ditched _____ ☐ Fatal ☐ Non Fatal Extent of Injury ____ Suspected cause of incident/injury/illness _____ TIME AND LOCATION OF INCIDENT Time _____ a.m. p.m. Dive Site/Location ___ _____ Country _____ _____ State/Province_ City ☐ Shore ☐ Ocean ☐ Lake River Quarry Spring ☐ Boat Other ☐ Pool Altitude (if applicable)

PLEASE CONTINUE ON NEXT PAGE

Page 1 of 4

(for office use)

INVOLVED PARTY (reported/approximate —					
BOTTOM TIME	DEPTH	SURFACE	BOTTOM TIME	DEPTH	SURFACE INTERVAL
1			4		
2			6		
3					
4					
☐ Diving Alone ☐ 2	Person Buddy Tear	n	ly Team Separated f	rom Buddy C	Class Size
Were dive tables used in			f yes, please provide Type		
☐ Dive Computer — Bra					
Tank pressure: Start of c	live		End of dive		
ENVIRONMENTAL	CONDITIONS	3			
Surf Condition			Surface Conditions	<u></u>	
Current	Wate	er Temperature	Vi	sibility	
☐ Kelp ☐ Rocks	☐ Wreck ☐ Nigl	ht 🛘 In surf 🔻	Other		
EQUIPMENT OF I	NVOLVED DAE	PTV [Compressed Air	litrox Other	
			2 COMpressed All		
☐ Mask ☐ Snorke					
Reguator SP			П он		
☐ LP Inflator ☐ BC			Other	_	
☐ Wet Suit, thickness					t, ibs
		ented by the involved		e	
City		S	itate Pho	ne ()	
RESCUE PROCE	DURES				
Injured party was found	On Surface	☐ On Bottom ☐	Depth (ft.) Other	er	
If a rescue was made, r	name of rescuer				
Qualification			Pho	ne No. ()	
Emergency medical trea	atment administered	at the scene Yes	☐ No Hospitalization ☐	Yes ☐ No Recor	mpression 🗆 Yes 🗆 No
Was mouth-to-mouth res					
Was CPR administered	The second secon		ncident?(n	ninutes) For how	v long?
Describe any additional	emergency treatme	ent			
	le anadical feelile O	DAIR OWN DC	und ambulance Private	e vehicle Other	
name of physician (if kr			UE ON NEXT PAGE		
		L FFYOF COMMIN			

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IF THE INCIDENT OCCURRED DURING TRAINING Please check below to indicate the records available and enclose a copy of these records with this report. ☐ Liability Release ☐ Training Records ☐ Medical History Form/Physician's Release ☐ Quizzes and Exam Answer Sheets IF THE INVOLVED PARTY WAS RECEIVING INSTRUCTION OR UNDER SUPERVISION BY AND I MEMBER AT THE TIME OF THE INCIDENT PLEASE PROVIDE: Name of Member _____ Number Initial Certification Level ____ _ Certification Agency__ Mailing Address____ State/Province _____ City _____ ____ Zip Code ____ Country Home Phone(___) ______Business Phone (___) FAX (____) ___ _____ Certificate No. ___ Name of Agent __ Please explain your official capacity and/or involvement in the incident, ie. boat/shore diversaster, course diversaster, course instructor, Name of Dive Center (if applicable) ______Number S _____ Mailing Address_ State/Province _____ City___ Zip Code ______ Home Phone(___) _____Business Phone (___) ____ Name of Agent ___ (for office use) INCIDENT REPORT FORM COMPLETED BY: (if different from member above). Number _____

PLEASE CONTINUE ON NEXT PAGE



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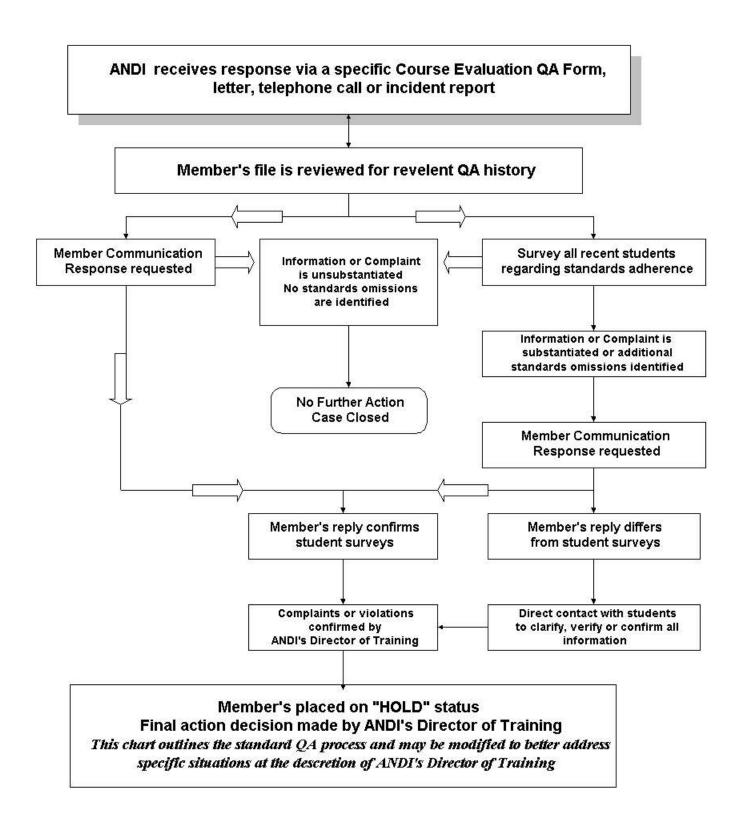
REPORT Describe what happened and the method of rescue. Be specific witnesses. If there was a possible equipment problem, please	c. Attach diagrams, photographs, and names and addresses of explain. Use additional sheets of paper if necessary.
Print Name	ANDI Certification #
Signature	Date Completed







Quality Assurance Flowchart



ANDI International Medical Statement

For Participation in Scuba Diving Activities - Participant Record (Confidential Information)

This is a statement in which you are inform	med of some potential risks involved in scuba diving and of the
conduct required of you during the scuba	training program. Your signature on this statement is required
for you to participate in the scuba tr	aining program offered by
(Instructor) and	(Facility) located in the city of
and the state of	

Read and discuss this statement prior to signing it. You must complete this Medical Statement, which includes the medical-history section, to enroll in the scuba training program. If you are a minor, you must have this statement signed by a parent.

Diving is an exciting and demanding activity. When performed correctly, applying correct techniques, it is very safe. When established safety procedures are not followed, however, there are dangers. To scuba dive safely, you must not be extremely overweight or out of condition. Diving can be strenuous under certain conditions. Your respiratory and circulatory systems must be in good health. All body Air spaces must be normal and healthy. A person with heart trouble, a current cold or congestion, epilepsy, asthma, a severe medical problem or who is under the influence of alcohol or drugs should not dive. If taking medication, consult your doctor and the instructor before participation in this program. You will also need to learn from the instructor the important safety rules regarding breathing and equalization while scuba diving. Improper use of scuba equipment can result in serious injury. You must be thoroughly instructed in its use under direct supervision of a qualified instructor to use it safely. If you have any additional questions regarding this Medical Statement or the Medical History section, review them with your instructor before signing.

MEDICAL HISTORY

To the Participant: The purpose of this medical questionnaire is to find out if you should be examined by your doctor before participating in recreational diver training. A positive response to a question does not necessarily disqualify you from diving. A positive response means that there is a preexisting condition that may affect your safety while diving and you must seek the advice of your physician.

Please answer the following questions on your past or present medical history with a YES or NO. If you are not sure, answer YES. If any of these items apply to you, we must request that you consult with a physician prior to participating in scuba diving.

Medical Statement

For Participation in Scuba Diving Activities - Participant Record (Confidential Information)

tion of birth control)?
accidents or decompression sickness?
rent back problems?
surgery?
res?
eart disease?
surgery or blood vessel surgery?
h problems?
ng or other bleeding disorders?
or alcohol abuse?
pe of hernia?
sease, hearing loss or problems with balance?
outs or fainting (full/partial loss of consciousness
the best of my knowledge :
Date

Signatures of Parents or Guardians Where Applicable

Date

Student Referral Form

This form is valid for 30-days from the date initiating instructor signs in Part 1.

Referral Instructor (print)

ANDI USA HQ 74 Woodcleft Ave. Freeport, NY 11520 516-546-2026 Phone

Freeport, NY 11520 516-546-2026 Phone 516-546-6010 Fax certifications@andihq.com



Student Name: _		Home A	Address:	. 1.6. 1	
City:		St/Prov:	Pos	tal Code:	<u></u>
hone:		Date of Birth: _		Ht: Wt:	M F
tudent's Local A	Address:		Phone:	Rr	m#
n Case of Emerg	gency Contact:		Phone: W	Н	
Part 1	To Be Fill	led Out By Initiating I	nstructor G	Medical history/ro	elease included
		hat I am an active instructor, in g			
		pleted all pool/confined water exa nd ready for openwater training.	ercises & sessions and	1 passed their written	exam. It is my opin
Date Training Co	ompleted:	Exam Score	e: N	umber of Pool Sessio	ns:
Instructor Name	:	Agency	Affiliation:	Nun	nber:
Facility Name:_		Addre	ess:		
		State/Prov:			
Phone:		Fax:	Email: _		
Initiating Instruc	tor Signature:		Date:		
		letion of part 2 G I request that			
- T will certary	student on comp.	retion of part 2 C Trequest than	t the Turt 2 mondetor	ectify student. 7th fe	cords included
Part 2	To Do Coo	andstad Dr. Dafamal Ir			
rait 2	10 be Coi	npleted By Referral In Read ALL Instruction			water)
	Dive #1	Dive #2 Dive#3	Dive #4	Dive #5	Total Dive
Date					
Student Initials					
Inst. Initials					
Does NOT Pa	ass Because :				

Agency#_____ Signed _____ Date ____

Instructions For Referral Process

It is understood by all parties that additional costs incurred will be paid for by the student unless other arrangements are made in advance.

In accordance with ANDI policy, referral's may be conducted by a non-ANDI instructor provided that they are an instructor in good standing, have current professional liability insurance, that they adhere to all requirements of their certification agency and that they follow the instructions below.

- 1. ALL theory, confined-water work and written testing must be completed satisfactorily BEFORE referral to another instructor.
- 2. The initiating / referring instructor must:
 - a) Fill in ALL fields for Part 1. If no signature is given, this form is invalid.
 - b) Where possible, contact the referral instructor in advance of the student's visit to go over any special details.
 - c) Provide a copy of the student's medical history as signed when the class was started.
 - d) For situations requiring a physician's approval, a copy of this release must also be provided.
 - e) The referring instructor must specify whether "they" intend to certify the student and order c-card or whether they request that the referral instructor do so. In this case, the referral instructor may or may not agree to that request at their discretion. Should they accept, it is understood that any additional costs for c-card processing etc. must be reimbursed to the referral instructor.
- 3. The referral instructor who is completing the training is to:
 - a) Keep a complete record of all openwater work performed. Both "they" and the student should verify each step in the fields appropriate under Part-2
 - b) Allow the student to use a Redundant Breathing System (a.k.a. pony system) if the student has one and wishes to use it. If the student does not have one, wishes to rent one, and one is available to rent, they should allow the student to do so. Sharing Air using a Safety-second Stage or using an independent scuba system (Redundant Breathing System) is standard ANDI procedure.
 - c) Utilize the student's log book for dive planning and post dive analysis. This should be signed for each dive completed.
 - d) At the end of the experience, they are to determine whether this student Passes or Does Not Pass the required skills to their standards of performance. The reverse side may be used for additional notes to the initiating instructor.
 - e) They should keep, for their records, one copy of page 1 and give another copy to the student. The student's copy should be taken back to the original referring instructor.
- 4. The student is to:
 - a) Bring the referral packet with them along with any medical forms to hand to the referral instructor.
 - b) Bring their log book for use during the openwater training.
 - c) Abide by all rules etc. that the referral instructor may have.
 - d) Adhere to the principals of their training as given by the initiating instructor.

Notes from Instructors:			