

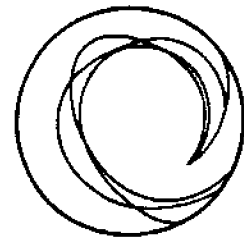
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DIVER EDUCATION SERIES

Recordkeeping for Divers

Lee H. Somers



Michigan Sea Grant College Program

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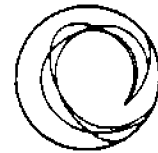
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RECORDKEEPING FOR DIVERS

Lee H. Somers, PhD

The diver's log book is a permanent record of training, experience, and qualifications. A record of diving experience is necessary for advancement in research diver classification at various universities and governmental agencies. Diving instructor applicants are required to provide a record of a minimum number of dives or hours underwater in order to qualify for acceptance into instructor training programs. Employed divers are required by both management and occupational safety and health regulatory agencies to maintain an accurate record of all dives.

Unfortunately, no standardized procedures or format for diver records exist at present in the civilian diving community. This is left to the discretion of the individual company, school, or agency. Most often the diver's individual log book is a matter of personal preference. Several excellent formats most commonly used are listed below.

1. Cumulative record sheets on which each dive is entered on a separate line are used most commonly. Vertical column headings generally include date, location, depth, time, environmental conditions, and buddy. These sheets may be simple looseleaf notebook pages or bound into a convenient small booklet form. Many universities use this format to facilitate submission of monthly records.
2. Several diving log books are available to sport divers that use a separate page for each dive entry. Some books provide headings and spaces for a fairly complete record of the dive. In addition, space is provided for remarks and observations.
3. Research divers often combine the diving record with a comprehensive field observation or data book. These books are generally relatively large bound notebooks with more than 200 pages. A standard dive record format may be designed and placed on a rubber stamp. The scientist simply stamps the page at the beginning or end of each dive and enters the appropriate dive data. This is most convenient for researchers since a record of observations or experiments may require only half of a page on one dive and 4 or 5 pages for another dive.
4. Some divers simply keep a diary-type record in a small notebook. There are no special forms or format. This is the least expensive method of recording dives;

however, it is the most difficult for others to review in terms of qualification advancement, employment records, or evaluation of experience.

Before one can design the "ideal" diver's record book, one must first determine what information must be included in the record, how this information may later be used, and who will use it. In general, employers, health and safety officials, and diving coordinators agree that the diver should record the following data for each underwater or pressure exposure:

- * Date and time;
- * Geographical location;
- * Name of buddy, tender, supervisor, divemaster and other persons directly associated with the dive;
- * Depth of dive;
- * Bottom time, decompression schedule (if required), and total dive time;
- * Environmental conditions (sea state, underwater visibility, water temperature, atmospheric temperature and conditions, and current);
- * Type of equipment used;
- * Brief description of work performed or dive activity;
- * Unusual conditions and/or observations made during the dive;
- * Description of injuries (if any); and
- * In the case of a working dive, the employer should be designated.

The above data should be recorded in a hard-bound book and, in the case of working dives, each dive must be verified by the supervisor or an employer representative. The recreational divers may not wish to go to such a comprehensive procedure for each dive. However, the above procedure has many excellent points.

Why use a hard-bound record book instead of looseleaf fillers in a ring binder? It seems that the looseleaf method is more flexible, less expensive, and easier to use. True! However, the diver's log book is a "legal" record of his activity in the event of a future court case that involved something that occurred during that dive or as a result of the work or observation accomplished on that dive. The hard bound book is more likely to be recognized as a legal document whereas the looseleaf sheets from a notebook may or may not be considered

acceptable. This is an especially important factor for recreational diving instructors and divemasters.

The "ideal" diver's record book should include much more than an entry for each individual dive. The most important additional data includes:

- * Records of periodic medical examinations;
- * Records of training in diving and all activities such as first aid, CPR, boating, etc., that relate to diving;
- * Records of diving-related employment;
- * Annual dive summaries or requalification designations;
- * Record of personal equipment including serial numbers or identification markings;
- * Record of equipment malfunctions/problems;
- * Records of equipment maintenance and inspection; and
- * Notes on special related activities.

The first entries in a diver's log book should be the pretraining medical examination results and a verified record of completion of training. Some agencies prefer to include a cumulative training, experience, and qualification summary page. Instructors and supervisors can enter brief notations verifying special training or advancement. The diver can briefly summarize each year of diving experience. For example, the diver may enter the following summary, "1985 dive summary: 56 scuba dives, depth 20 to 110 fsw including 6 dives over 80 feet, 37.8 hours total cumulative dive time; 14 surf entries southern in California, 10 boat ocean dives in Caribbean." The diver's log sheets may be reviewed and this entry verified by the agency diving officer, dive club safety officer, or other "official" persons. Divers not involved with agencies or clubs simply make the entry and personally attest to its accuracy. This is much simpler for persons reviewing the book than attempting to count or read each individual dive log sheet. In this fashion, several years of diving experience and training can be recorded on a single sheet for "quick-look" review.

Some diver record books include special sheets for periodic depth gauge calibration data, flotation unit (BC) inspection, regulator inspection, and cylinder inspection. These records are vital to diving safety.

A cumulative medical record sheet should include entries of periodic medical examination (signed by a physician), illness or injury related to diving, and medical information that should be known by persons who might be treating a diving accident victim.

The diver or his buddy should give the diver's log book to the attending physician if it contains this information.

How is the information in a log book used? For a commercial or scientific diver this data becomes vital for qualification or classification advancements. In research diving it is a common practice to limit the depth and/or environmental condition exposure for a diver until he has acquired sufficient experience and proficiency to advance to the next level. The diving supervisor, project director, and/or division representative must neither force nor permit a diver to exceed his level of qualification. In many cases the diver's log book is consulted as a verification of the diver's qualification before assigning work tasks.

As previously stated, candidates for scuba instructor certification must provide the course or institute director with a complete record of diving experience. In order to qualify for certification the individual must have logged a given number of dives and/or hours underwater using scuba. In past years this requirement has often been waived since many recreational divers have not maintained records of their experience. In other cases, especially with looseleaf log book binders, it is probable that records have been falsified. In reality, hard-bound record books should be considered mandatory if an individual anticipates eventually qualifying for scuba diving instructor certification.

In recreational diving as well as commercial and research diving there are now many levels of training or advancement following "basic" certification. These may include open water I, open water II, advanced, divemaster, assistant instructor, and instructor certifications for recreational scuba divers. In addition, a number of specialty certifications such as cave diving, ice diving, and underwater photography are available. Various prerequisites in terms of training and experience are necessary for acceptance into these courses. The log book is the diver's only record of experience.

In commercial diving, qualification advancements are based on field experience, diving proficiency, and technical proficiency. The diver must maintain and verify a specified number of dives or exposures each year in order to maintain a given qualification rating. These various ratings include tender/trainee, tender, diver/tender, air diver, rack/console operator, mixed gas diver, saturation diver, lead diver, air diving supervisor, and mixed gas diving supervisor. Advancement and designation depend upon number of field days diving and tending, specific number of dives (with minimum depth and bottom time requirements) at each designation, and technical training. The diver's record book with employer verifications is his only personal record of experience. This record is vital to his advancement, work assignment, and pay-grade designation.

What about the "average" recreational diver who never intends to work underwater, take an advanced course, or become an

instructor? Why should this individual maintain a log book? At the completion of basic training the diver generally receives a plastic certification card. This card simply indicates that the individual completed a training course in accord with a given minimum standard of knowledge and skill performance. Realistically, this card does little more than identify that the individual is qualified to scuba dive in a swimming pool and that he has participated in a few supervised open water dives. Certainly, it does not indicate a level of proficiency in open water diving since many authorities recognize that it takes at least 10 to 12 open water diving exposures to gain acceptable proficiency for even shallow open water scuba diving.

The card generally does not indicate environmental condition exposure or training. A diver trained to dive in a calm, small, shallow quarry in the Midwest receives the same plastic card as a diver trained to dive under rigorous surf and ocean conditions of northern California. What happens when a diver travels from the midwest to northern California? How does the charter boat operator, the divemaster, or the buddy determine the diver's qualifications? The log book is, in my opinion, the only cumulative record that the diver can use to verify experience and qualification. I feel that it is quite appropriate for a charter boat operator, a divemaster, or a buddy to ask to see some sort of verification of experience that indicates that a diver is qualified to participate in a given diving activity. This is very little to ask considering that these parties may be "held legally responsible" if something were to happen to the diver. To be even more basic, the diving buddy may have to depend on that stranger to save his/her life. Again, the diver's log book is his only record of training and experience.

Scores of diver's logbooks are available from instruction agencies and diving equipment supply stores. Some universities now maintain records on computers. In such cases divers complete a special single page form for each dive and submit it to the Diving Office. Divers are encouraged to select their personal recordkeeping system to meet present and anticipated future requirements.

The diver's log book is not a private or confidential document. As evident in the above discussion a number of persons including advanced course instructors, divemasters, instructor training directors, employers, charter boat operators, court officials, safety inspectors, supervisors, project directors, and diving buddies will at sometime or another review the content. The entries must be neat, complete, and **factual**.