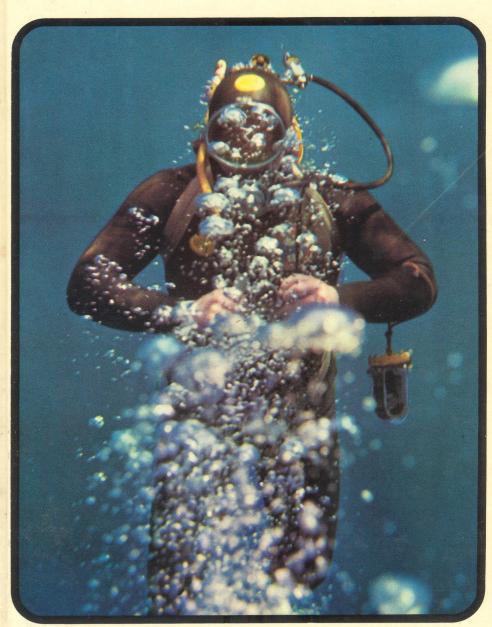
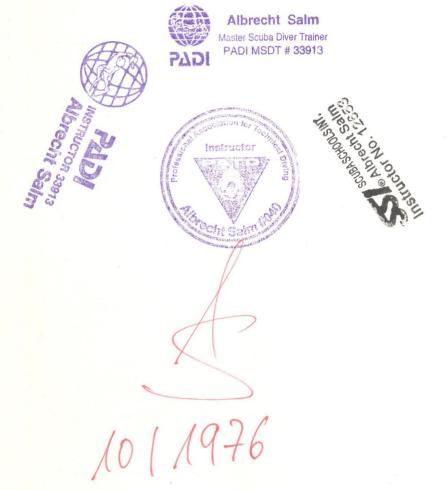
THE BRITISH SUB AQUA CLUB

DIVING MANUAL





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THE BRITISH SUB AQUA CLUB DIVING MANUAL

A Comprehensive Guide to the Techniques of Underwater Swimming



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FOREWORD

Since its birth in 1953 the British Sub Aqua Club has grown to be the largest single Diving Club in the world, with over 450 branches and over fourteen thousand members. It is the recognised governing body for the sport in the United Kingdom and a major member of the International Federation, the Confédération Mondiale des Activités Subaquatiques.

The Club has kept pace with the rapid developments in underwater exploration and research and its members have made significant contributions in these fields. Indeed a high proportion of the leaders in underwater science and technology in Britain, learnt their diving in the BSAC.

At this stage in the Club's expansion, it might be thought that the BSAC has outgrown its original concept and has become remote from the rank and file diver. Nothing could be further from the truth, for the most attractive characteristic of the Club is the strong feeling of comradeship held by its divers in the branches as far afield as Australia and the United States. The Branches are united by a mutual love of diving and above all, by the codes and training principles originally established by the Club in its early days and which have grown to be its backbone. It is these principles which are exemplified in the Diving Manual of the British Sub Aqua Club. The Manual is given to every new member and because of the Club's concern for good and safe diving everywhere, it has been made available to the general public for many years.

The Manual is written by members and close friends of the Club and in it will be found the most up-to-date training procedures and articles from the pens of experts on all aspects of diving and underwater exploration. Thousands of Manuals have been printed in its six editions, and it is the first and most essential item of every diver's equipment. I am sure that this 7th edition in its new layout will prove even more popular and as indispensable as its predecessors.

Alexander Phider

Chairman, British Sub Aqua Club.

INTRODUCTION

This is a new style Diving Manual; the layout of the contents has been altered and the text has been metricated. Many members will want to know the reasons for these changes, therefore this is more in the nature of an Explanation than an Introduction.

The contents have been compiled using, as a basis, all the lectures comprising the BSAC training programme. To this has been added sections of related interest not included among BSAC lectures. And the whole book sectioned for easy reference.

Metrication was given a great deal of thought. It is a system eminently suitable for diving practice. As an example, one bar (or atmosphere) is virtually equal to 10 metres (or 33 feet). Thus we have a progression in depth, in terms of bars, of 10, 20, and 30 metres instead of the rather unwieldy 33, 66, and 99 feet.

Of greater importance is the fact that eventually everything will be metricated—Admiralty charts being printed have already changed over to the metric system—and a lack of knowledge in this direction could be disastrous for the diver. It was, then, really a question of whether we stumbled along for years, changing gradually and in a constant state of confusion; or virtually immediately, making the change quickly. The latter decision has been taken, and I think in the near future it will be seen that the decision was correct.

However, shortage of time has precluded complete metrication. Some of the Appendices—particularly the ones pertaining to BSAC tests—have retained the old measurements for varying reasons. The next edition will see this completed.

Leo Zanelli, Editor, National Diving Officer.

ACKNOWLEDGEMENTS

The British Sub Aqua Club gratefully acknowledges the ready participation of so many specialist authors, named throughout this volume, who have contributed. For this edition, thanks are also due to Hugh Singer, who handled production, and Editor Leo Zanelli.

We also take great pleasure in thanking those concerned with the previous editions, including Oscar Gugen, Club Vice-President and founder Chairman; Colin McLeod, Club Vice-President and founder Vice-Chairman; the late Alan V Broadhurst and George F Brookes who produced the 1960 edition; and A Baverstock, Dr J Beynon, A F Brooker, Dr R C Brookes, P A Browne, M Everard, W F Gannon, the late M Goldsmith, R Goodwin, B G Hewitt, S B Jones, R W Knell, R Larn, B Marshall, R B Matkin, D Moody, J Newby, J R Phoenix, Q Reynolds, L Zanelli, A H Ridout, Miss Annette Atkinson and the following officers of the Royal Navy; Sgn Lt-Cdr Peter Barnard, Sgn Lt-Cdr Rex Gray (RAN), Sgn Cdr Eric Mackay, Sgn Rear Admiral Stanley Miles, Capt A Checksfield RN.

Finally, a special acknowledgement is rightly due to the first Club Diving Officer, Jack Atkinson, upon whose original ideas the Club's training programme is based.