

# The SAA Bühlmann DeeP-Stop System Handbook



**CMAS**  
CONFÉDÉRATION MONDIALE  
DES ACTIVITÉS SUBAQUATIQUES

WORLD UNDERWATER FEDERATION



# The SAA Bühlmann Deep-Stop System

by

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This book is part of the SAA decompression training programme forming the Diver Training Course up to and including Dive Supervisor. The SAA operates through the "Club System" where the Instructors act as mentors to the trainee divers. It is for the trainees to complete the answers to the questions as the course progresses and then discuss their answers with the Instructor, who will give any necessary help and advice.

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## IMPORTANT

Because people vary in their susceptibility to decompression illness, oxygen toxicity, and carbon dioxide retention, no set of tables or personal decompression computer (PDC) can guarantee total avoidance of diving related illnesses; even if the limitations of the tables or PDC are complied with in full. Keep in mind that diving is a risk sport!

### Special message

Because of the dangerous nature of diving, the user takes full responsibility for any accident and no warranty concerning the advice, tables or PDCs mentioned in this book is expressed or implied. Under no circumstances will the SAA, the estate of the late Professor A A Bühlmann, the author or the publisher be liable or responsible for any consequential loss and/or damages.

### Caution

Diving cannot be learned by just reading books. It is a practical sport which requires skills and knowledge. This book provides notes for SAA Diver Trainees and is only part of the SAA's Diver Training Package.

Never dive beyond the limit of your training and experience without a qualified instructor.

***Know what you're going to do before you do it!***



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## Page of Honour

The production of this Decompression Handbook and Instructor package that supports this training programme has involved many dedicated hard-working people who gave of their time to read this material and then offered me thoughtful advice. On behalf of the SAA membership and the National Council I would like to thank them all for their constructive views and advice. Those who were involved are as follows:

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Steve Love **National Diving Officer**

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To Dr Petar Denoble of DAN my particular thanks for running a risk analysis on our new Tables.

Finally, thank you to Dr Richard Pyle for his very kind forward.



...The SAA Bühlmann DeeP-Stop System described in this book is, in my opinion, an important step in the right direction for effective decompression management. It provides a way of implementing ascent profiles that capitalises on the robust empirical experience of both technical dives, as well as the many, many more dives that have been conducted following the Bühlmann decompression algorithm, but without departing from sound theoretical foundations. Importantly, the method takes into account the extended time at depth when conducting the deep stops, and adjusts the shallow stops accordingly. Bob has managed to explain the intricacies of this complex topic in a way that is intuitive and easy to understand, and I applaud him for it...

### **Dr Richard Pyle PhD**

It has been said that decompression illness (DCI) is a statistical probability, in which case there is an element of chance. Chance, however, favours the prepared mind. To stack the probabilities in your favour follow the well trodden path of the three Ps: preparation, preparation and preparation.

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