

RAF SAA/DO/1

DNPTS
Orion Block
HMS Nelson
Portsmouth
PD1 3KH

12 Squadron
RAF Honington
Bury St Edmunds
Suffolk
IP31 1EE

Honington 561 Ext 575

03596

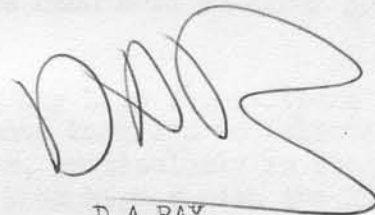
5 May 76

SUB AQUA DECOMPRESSION TABLES

Reference: RNAS Culdrose letter dated 6 Apr 76.

1. The reference letter forwarded views on the decompression tables to be used by Service sub aqua divers from the Chairman of the RN and RM sub aqua club. Para 2 of this letter implied that the views expressed in the letter were those of both the Army Sub Aqua Diving Association and the RAF Sub Aqua Association. This is not the case.

2. The RAF Sub Aqua Association believes that there are significant advantages to the adoption of the RNPL/BSAC decompression tables for Service sub aqua diving, principally in having more credible repeat dive rules than current RN tables. I attach a copy of my letter to the Chairman of the RN and RM Sub Aqua Club which amplifies RAF SAA views.



D A RAY
Sqn Ldr
Diving Officer
RAF SAA

Enclosure: RAF SAA/DO/1 dated 9 Apr 76

Copy to:

Superintendent of Diving
AEDU
HMS Vernon
Portsmouth

Commander R S C Lowick
(Chairman RN and RM SAC)
RNAS Culdrose
Helston
Cornwall

→ Major P Ormerod
(Vice Chairman ASADA)
Ministry of Defence AG6
Stanmore
Middx

Sqn Ldr D A J Taylor
MOD (PE) MAP 1a
St Giles Court
St Giles High Street
London WC2K 8LD

Captain J D W Duncan
(Secretary ASADA)
HQ Scotland (Army)
Edinburgh

From Squadron Leader D A Ray RAF

63

No 12 Squadron
Royal Air Force
Honington
Bury St Edmunds
Suffolk
IP31 1BE

RAF SAA/DO/1

Commander R S C Lowick RN
RNAS Culdrose
Telstar
Cornwall

Honington 561 Ext 575

9 April 1976

DECOMPRESSION TABLES

1. Doug Taylor has asked me to comment on your draft letter to the Superintendent of Diving at HMS Vernon in my capacity as diving officer of the RAF Sub Aqua Association.
2. Firstly some specific comments on your letter:-
 - a. Para 3a does not apply to the RAF - we have no service divers. Therefore the occasions of sub paras 3b,c,d are much more numerous for us!
 - b. Para 5. The RN service diving authority may have reservations on the safety of the RNPL/BSAC tables, but I have been led to believe that they are safer than the standard RN tables, particularly in the 30 metre depth zone where bends incidence has been higher with the RN tables. The RNPL/BSAC tables are of course not "new". The formulae and assumptions are those used in the 1968 RNPL tables that have been proven in over 50,000 dives by commercial operators who of course tend to use tables as they were designed, (ie dive to maximum depth, work at maximum depth, then surface using the table). Amateur divers tend not to dive in this manner, but still decompress for the maximum depth of a varying depth dive.
 - c. You may have gathered that I do not agree with your para 8.
3. I believe that there are significant advantages to the RNPL/BSAC table. Firstly, and in my view most important, there are simple and credible repeat dive rules. With the RN tables we are expected to take full account of a previous dive 5 $\frac{1}{2}$ hours earlier, but if we delay our second dive for 30 minutes we can forget the previous dive completely! The RNPL/BSAC repeat dive rules cannot and must not be applied to the RN tables. Secondly, the table works in 2 metre depth increments, which is not as coarse as the RN metric table. Thirdly, the table has been compressed and simplified by the two assumptions that we will not dive below 50 metres nor become involved in dives involving more than 30 minutes decompression. (The last advantage could of course be easily conferred on the RN tables using the assumptions and abbreviating them in the same way). Incidentally, there is a full version of the RNPL/BSAC tables that the RN could adopt - the abbreviated version would obviously not be adequate for their needs.
4. Finally, one comment on the Cranwell paper on the RNPL/BSAC table; Sergeant Mays gives the incorrect reason for the introduction of a maximum descent rate. The tables were designed round an assumed dive profile with

a dive at 30 metres per minute to the max depth, time at depth and then ascent at 15 metres per minute. Obviously if the 30 metres per minute descent rate is exceeded, the diver will be under pressure for longer than the table envisaged, so it is included as a limitation.

5. In conclusion, in the RAF we become involved with civilian clubs and BSAC courses and examinations frequently and none of our divers are professional service divers. We believe that the RNPL/BSAC tables are as safe if not safer than the current RN tables and have significant advantages over them, particularly in more credible repeat dive rules. We therefore consider that it is in our best interests not to be working to 2 different tables and to adopt the RNPL/BSAC table for all our diving. We would obviously like to see the same table used in the RN and Army for amateur (if not professional) diving as this would avoid confusion at JSSADC and on joint service expeditions.



Copy to: Squadron Leader D A J Taylor BEM RAF
Secretary
RAF SAA

