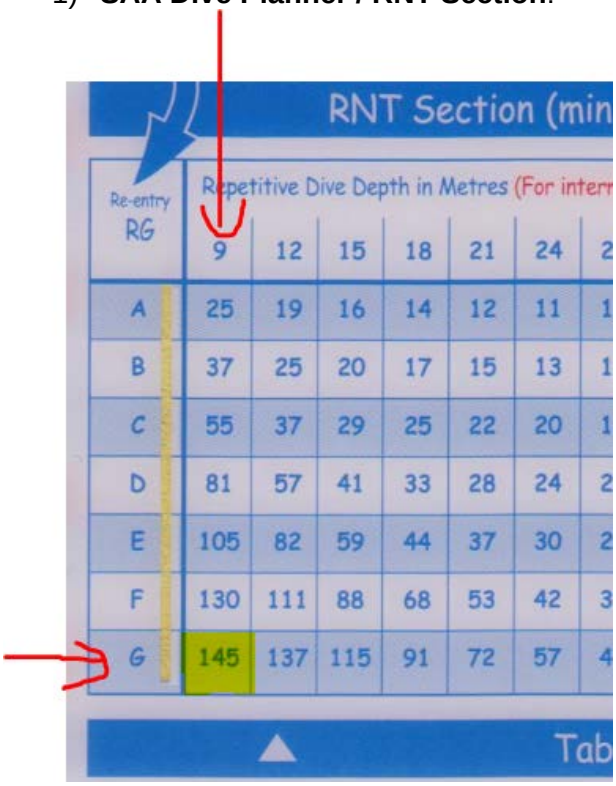
1) **SAA Dive Planner / RNT Section**:



RNT Section (min

Re-entry RG	Repetitive Dive Depth in Metres (For interr						
	9	12	15	18	21	24	2
A	25	19	16	14	12	11	1
B	37	25	20	17	15	13	1
C	55	37	29	25	22	20	1
D	81	57	41	33	28	24	2
E	105	82	59	44	37	30	2
F	130	111	88	68	53	42	3
G	145	137	115	91	72	57	4

Tab

Bühlmanns original value (p. 235 in "Tauchmedizin", Albert A. Bühlmann, Ernst B. Völlm (Mitarbeiter), P. Nussberger; 5. Auflage in 2002, Springer, ISBN 3-540-42979-4) reads „154“

2) **DeeP Stop Handbook**, p. 3-8:
„ … *about 8000 metres above sealevel.“*
No, would be severly hypoxic. It is about 2000 to 3000 m:

(taken in the passengers cabin during a standard intercontinental flight)
So it should read 8000 feet, probably.

3) **SAA Nitrox Diver**:
p. 3-2 „*Where 1 = the surface pressure 1 bar*“
No: 1 = 1.0 or 100 %, i.e. unity / dimensionless. You subtract F02, also dimensionless. Pls. cf. the EAN Manuals of:
PADI, SSI, ANDI, IANTD, NRC, RAB, TDI, NOAA or NAUI.
You could as well consult with the **Rev.7 of the USN Diving Manual, Chapter 10**: „Nitrogen-Oxygen Diving Operations“
Instead of (1 - FO2) you could use as well directly FN2 (also dimensionless)

p. 7-2 *„… must be allowed to stand for at least 24 h …“*
No: the approx. mixing time for an average scuba tank is in the order of magnitude of less than 10^4 sec. This is a solution of a partial differential equation for transport phenomena. Depending on the transport coefficients, the temperature and the boundary conditions for the geometry of an average scuba tank for 8, 10, 12 or 15 L WC.

There are a couple of Gas Mixing / EAN / Blending Manuals which come to the same conclusion; pls. cf.:

➔ Section 14, Popular Misconceptions, p. 137 in:
Raftis, Nicos, The Technical Guide to Gas Blending, Best Publishing 2000 ISBN 0-941332-84-5,

or:
➔ **PATD Gas Blender Manual** (Franz Rettenmaier, Dr. Bernd Aspacher)

4) Out of the Decompression Matrix:

p. 63 & p. 84: „ …*PADI moved to eight* …
or p. 69, or p. 72, Fig. 3.17.
No: Workman i.e. USN, used already 8,
resp. 9 for exceptional exposures since long, pls. cf. p. 5 in:
NEDU Report 06-65;

Between 1980 and 1992 Powell, Bassett and others et al. produced a lot of preliminary sets of M-Values for a new PADI table with reduced NDLs;

the RDP uses 14 compartments in its final, published configuration. Pls. cf. the published scientific source of the RDP at:

The DSAT Recreational Dive Planner: Development and validation of no-stop decompression procedures for recreational diving, Hamilton, Rogers, Powell, Vann, 28 Februar 1994

there on p. 21, Table III with the appropriate 14 M_0-Values for the RDP.

The Fig. 3.17 values and elsewhere are obsolete, they are from the „Blue Book“ (Powell, 1988), and, by the way:
the 40 min value for the USN column should read 56 instead of „58“
80 min „54“, 120 „52“; pls. cf. again that particular NEDU Rpt. on p. 31 & p. 5.

p. 69 „ *… not confined by any previous baggage.“*
Just a comment from mine: Yes, that was really funny, that Albert Alois was not interested in the first place, he considered recreational scuba diving as fool hardy (priv. com.). But after the ignition spark from Hannes Keller there has been a cooperation between USN and RNPL. This can be seen from their, sometimes joint, contributions to the Underwater Physiology Symposions. And when Albert Alois & Hannes started their famous mixgas dives in 1959, the USN had already since 1955 adressed these questions. Keller relied heavily on the work of Dwyer (personal communication, 1998).

As well various perfusion models with 16 half-times or even more have been already available before Bühlmann & Keller and later on Benno Schenk and Achim Hermann used them. The fore-runners have been:

Schreiner, Ruf, Müller (in the order of appearance).

Thus, this statement and as well a couple of others, like these on
p. 73: „ …*were ahead of him* …“ would be candidates for careful revision.

There is abundant information published from first-hand, for eg.:
SPUMS Journal Volume 29 No.2 June 1999

p. 70, „ *.. H = Hospital*“
No: ZH is the ISO abbreviation for Zürich, pls. see as well the license plates of swiss cars

Fig. 3.15: does not match the coeffcients published from Bühlmann, neither in:
Dekompression - Dekompressionskrankheit, A. A. Bühlmann, Springer, 1983, ISBN 3-540-12514-0**, p. 27**
nor:
Tauchmedizin (Barotrauma, Gasembolie, Dekompression, Dekompressionskrankheit) A. A. Bühlmann, Springer, 1993, ISBN 3-540-55581-1, **p. 108**
nor:
"Tauchmedizin", Albert A. Bühlmann, Ernst B. Völlm (Mitarbeiter), P. Nussberger; 5. Auflage in 2002, Springer, ISBN 3-540-42979-4), **p. 158**

There is as well no match with the ZH-L 16 B coefficients.

p. 85, Fig. 4.9; x-axis „*Half-time*“.
No: it is the time.

p. 131, „ … *3.3 Bar*“
No: it is 3.2 Bar (4.0 - 2.4 = 1.6, 50 % yields 0.8 Bar; i.e.: 4.0 – 0.8 = 3.2 Bar)

p. 132, „ … *Völlem of Zurich*“.
No: Ernies correct family name is Völlm and the city is Zürich.

p. 145, „ … *Deco-Brain I … employed … ZHL 12 algorithm*…“
No: the Deco-Brain I did not use this algorithm: it used a stored table and interpolated the tabulated values with an undocumented / untested procedure which utilises a 80 min. compartment. Pls. cf. the international patent specification of the Deco-Brain I:
WO 83 / 00670

This is inline with what Bühlmann himself wrote in his 2002 book (p. 195).

The first computer from the Deco-Brain series which really used the algorithm was the successor of the Deco-Brain I, it was the Deco-Brain **II.** The coefficients, however, have been adapted for computer-useage by Dr. Max Hahn (pls. cf. the Deco-Brain II User Manual, chapter „X“, p. 22)

p. 168, Fig 10.2: EANx is 2 *, probably instead of PO_2?