

## DIVING INCIDENTS

Margaret Marks, Southern Region Coach

"First, Martin's apologies for not being able to be here this weekend. He is currently in the South Atlantic on what you might call a cruise he could not refuse and has asked me to read his report for him.

There are two main themes to this year's report. First, 'When will we ever learn?' and the second 'Know your limits!'. The first comes from an overall impression of the same mistakes coming up over and over again. The second, 'Know your limits!' from the number of occasions where divers are taking on dives that are well outside their capabilities and suffering the consequences.

For those new to the Report of the Diving Incident Panel, (Appendix A) let's have a quick look at its coverage. Amongst your delegate papers you should have a copy. The first page presents a Summary of the incidents split down into types, depths and involvement. There is also a month-by-month breakdown of accidents, but this, as usual, only tends to show divers' preference for the Summer in this part of the world. On the second page, an analysis of each incident has produced a list of major factors which contribute to the incidents. These each have a code number and for example, '17' is a fatality.

The summary reports themselves contain the bare bones of the reports and I have tried to highlight the areas from which others can learn any lessons. I believe that this is where these reports can do most good. I have doubts about the value of detailed statistical analysis of such a small sample of widely varying incidents and have avoided this area as far as I can. After each of these summaries there is a series of code letters and the key to this is at the top of the second page. There is usually a number in italics next, which records the depth in metres, if appropriate, followed

by the code numbers of the relevant major factors. Each summary is identified by a month and a code number. Please note that no matter what they have done or failed to do, no divers are ever named in the reports, nor are the detailed locations or dates revealed. The guilty are protected until they stand up at the back here and argue about it.

The Incident Year runs from 1st November to 31st October and this year, within three weeks of starting, two fellow divers were dead. The total for the year was 9 fatalities. Looking at this year's fatalities as a whole, 4 involved trios diving together and 3 separations. In two of these, the divers died alone and in another, two divers out of a trio disappeared and have been assumed dead. Two other fatalities were diving solo. So of these 9 fatalities, 3 stemmed from buoyancy problems and three were women.

**Trios, separated and solo** divers tragically appear monotonously every year. When will we learn?

Let's look at some specific incidents:

**March 38/83** was a double fatality and widely reported. A trio were part of a BSAC Branch group diving from a hardboat. The Branch report notes that in anticipation of a deep dive in the afternoon all three undertook a dive of not more than 9m in the morning. The second dive was to a wreck at a depth of around 22m. The trio consisted of a Third Class dive leader with 40 to 50 dives experience described as 'cautious and careful'; a novice whose diving experience was limited to two previous club training trips during the a two-year period with little in between.

This novice had panicked on a couple of occasions, including earlier in the week. The third member was on his first training trip and making his fifth dive. One report indicates that no alteration to weights was made between the two dives.

The second dive was uneventful until one novice reached 70 at pressure. The dive leader indicated that they should ascend. The novice made several attempts but kept returning to the bottom. It is worth noting at this point that the Branch policy was that ABLJ's should be totally vented before commencing an ascent. The novice's air was nearly exhausted and at this stage the dive leader partially inflated the novice's ABLJ sufficient to give him a lift and he carried out a controlled buoyant ascent until 10m where he lost control and speeded up. The last that he saw was the dive leader swimming over to the other novice who was leaning against the wreck at an angle of 45°. The dive leader and the other novice did not surface and were, as far as I am aware, never found. I believe that this is an example of divers undertaking a dive outside their capabilities.

**June 68/82.** During a 30m dive a diver gave his buddy an 'up' and 'something wrong' signal. He then dumped the air from his ABLJ and, as they started to ascend, his buddy noticed he was finning erratically. At 20m the diver began to descend and his buddy followed him down where he found him lying on the bottom with his DV out of his mouth. At first the diver resisted having his DV replaced but then went limp. On trying to inflate his ABLJ his buddy found that there was insufficient air in it... remember that they were at 30m and would require four times the air needed to inflate it on the surface.

The other diver had been using it for buoyancy adjustment. The buddy then tried to lift him using his own ABLJ but lost his grip and ascended rapidly, alone. The body was located shortly afterwards by a Naval diver from a helicopter.

These two incidents illustrate the dire consequences of failure to weight correctly for a dive; the bad practice of using an emergency air supply for buoyancy adjustment and the reluctance of divers to ditch weightbelts in an emergency.

**August 97/83** involved a totally untrained diver who bought an outfit of equipment and, apparently, offered to examine a fouled yacht propeller. He swam out alone on the surface across a harbour and was seen waving and shouting for help before submerging and drowning. Several local lifeboatmen valiantly attempted to retrieve him in 8m of water without success. After a search the local BSAC Branch, who had been diving in the area, located the body. The victim was wearing a wetsuit jacket, a weightbelt with a quick release jammed, no ABLJ and his air was turned off. There is something to be said for the qualification card system used in the USA which prevents untrained divers buying any air breathing equipment or having cylinders refilled.

**December 1/83** was a tragic accident in which a diver became separated from the other two of a trio in a cave system and then turned the wrong way into a long tunnel. The diver ran out of air. The point to be brought home here is that our training is not directed towards the special requirements of cave diving which has its own rules and recommendations. In other words, another dive that was outside the limits. 'Rip-cord pulling bale-outs' to the surface are of no use in this environment. I commend to you an article by Dr. Peter Gianvil in the February '83 *Diver* and I quote from it: 'Until you can get to grips with, and appreciate the strange and beautiful environment of a cave you have no real right to cave dive. The fatality rate among cave divers is quite high enough without non-cave-diving divers contributing to it'.

#### Bends

I have received details of 38 incidents involving decompression sickness of some form.

'Raspberry of the Year' award goes to the diver who made a formal complaint because his wetsuit had been cut off by recompression chamber staff during treatment.

Rescue services come in for a lot of flak from time to time if things don't go right or happen quickly enough. However I believe we should spare a thought for the people, both military and civilian, who spend long hours, mainly at weekends, recompressing bends victims. Some of these incidents involve incredible stupidity or ignorance.

**April 33/83** - solo diver using a decompression meter only spent 'about 25 minutes' at 'around 140 feet'. That is 4 minutes off the end of the BSAC Table. He was using an SMB with 120 feet of line so that the buoy was well submerged. He began his ascent when his air reached reserve level and stopped for a short while at 30 ft until his air ran out. On surfacing he had lost his boat cover and was picked up by a passing yacht. At about this time shoulder pains started to develop. He relocated his own boat and returned to the shore for a fresh cylinder. He then went back out again and carried out the dangerous practice of re-entry decompressing, returning to 60 ft. No diving flag was displayed and while the cover boat was some distance away a power boat became entangled in his SMB, wrenching the diver's arm and fingers badly. He abandoned the dive - you might think his best decision all day - and sought recompression.

**June 58/83** - a trio, again, diving to 30m. One diver signalled his intention to surface and went alone. Either he had to adjust his weight belt or it came undone but the result was that he replaced it around his waist, trapping a shot line inside it. On finding himself snagged he inflated his ABLJ but this only tended to choke him. While trying to cut himself free with his knife, he accidentally stabbed himself in the stomach. Luckily he was freed shortly afterwards by his buddies as they surfaced. He was also found to be suffering from shock and near drowning. The point I want to make is 'one up - all up.'

**July 90/83** - On day 1, two divers did a bounce dive to 50m because their shot line was off the wreck and then spent 19 minutes at 42m. Their subsequent stops ignored the 50m maximum depth. They realised they had missed stops but, after 21 hours without symptoms undertook another dive, this time to 48m for 18 minutes. This is one minute off the end of the BSAC Table and so they appear to have added a 'bit' to the stops to compensate, a very risky practice. After the dive one diver complained of shoulder ache. At 4am the next morning the symptoms were much worse and recompression was arranged. The group had consisted of some very experienced and qualified divers. The Diving Officer, who was a First Class Diver, noted in the report that the hardboat skipper must have thought they looked competent because he had put them straight onto the wreck with no checkout dive. How wrong can you be! Here we have divers who supposedly knew better, failing to work up to deep dives, deliberately cheating on Tables that were being used to the limits and ignoring symptoms in the light of missed stops. The bent diver had already had a bend on an earlier occasion and was known to skimp stops.

**July 121/83** is another classic. Three divers carried out a dive in the morning to less than 9m. Later in the day they went to 30m for the full no-stop time, ignoring the penalty for the first dive, not appreciating the requirement. Minor symptoms of an ache in the arm and stiff neck were noted in one diver but were put down to muscular strain. After a further 30m dive the next day the symptoms deteriorated but a 32m dive was made on the day after that. On returning home 'pins and needles' pains were noted in an arm and both legs and the diver felt generally unwell. A spinal bend was diagnosed and he spent 5 hours in a chamber. As I'm sure the majority of you know, a 9m dive undertaken before another dive has to be taken into account.

Consult the Decompression Workbook available from the BSAC shop outside if you have any doubts at all.

Finally, amongst this type of incident, is **July 94/83**. On a BSAC branch dive after 8 minutes at 46m a novice

diver experienced loss of balance and disturbance of speech followed by paralysis of the left side. He was taken to a chamber by helicopter but the symptoms had subsided by the time they arrived there. What on earth is a novice doing at 46m, with incidentally, a Third Class buddy? This is another example of Dive Marshals not knowing the limits.

**Dive Marshals.** In last year's report and in September's *Diver*, the large number of incidents that could have been prevented by a good Dive Marshal have been emphasised. Based on the reports that I see, the standard in many Branches is poor. They also have their problems.

**April 34/83** saw BSAC Branch divers being rescued in a Force 11 gale. The conditions were so severe that a lifeboat capsized on its way to assist them. Now, I know that we joke about the quality of weather forecasting, but I can't believe that this was not predicted. Did the Dive Marshal get a forecast?

**May 57/83** records that a novice on fourth open water dive did a buoyant ascent from 96 ft when he ran out of air! A helicopter was called to lift him to a recompression chamber. A very honest Branch report noted that an inexperienced Dive Marshal, confusion over contents gauge units and no record of dive times contributed to the problem.

Is it not time we gave more thought to who we let loose supervising our members before more are killed or injured?

**Lost Divers.** There have been 21 reports of lost divers. **August 132/83** concerns yet another trio who anchored their boat and all went in together. One of them had problems with his mask and surfaced alone. During the two or three minutes it took him to sort it out he was swept away by the tide and in poor visibility lost sight of the boat. After 20 minutes he was picked up by a fishing boat. One up – all up!

**August 134/83.** The cover boat lost sight of one SMB and the divers beneath it were picked up by a fishing boat. Another SMB came adrift from its line and was followed downcurrent by the cover boat. After a fruitless 20 minutes search the Coastguard was informed and the missing divers picked up by another boat. The DO commented in the report 'it is only this year that I have been insisting that all dives, except some wreck dives, be carried out with the use of SMBs. This incident shows that some divers haven't realised why.' Commendable policy.

**August 135/83.** Two divers in an inflatable. They both dived and one developed problems with his demand valve and surfaced. The other decided to drift dive on the anchor line. However the current was too strong and he had to let go. He surfaced out of sight of the boat having continued the dive down current. He then had to swim ashore. A helicopter and lifeboat were called out. As I've noted in previous reports, helicopters cost several thousands of pounds an hour to operate.

**August 96/83.** Yet another trio of divers who surfaced over 2 miles from their boat and were only found after a 2 hour search by a helicopter and lifeboat.

The majority of these incidents boil down to two major factors: Not using a surface market buoy and/or inadequate surface cover. These in turn reflect the standards set by the Dive Marshal.

## Boats

Boats are a constant source of problems to divers. One Branch, **April 36/83** had their hired fishing boat sink under them and were only saved from a nasty incident by beaching it.

**June 65/82** reported that a 17-ft power boat capsized whilst a Branch were practising man overboard drills. The boat remained afloat but inverted rendering the marine and CB radios inoperative, preventing access to the flares in the cabin and also concealing the superstructure which had

been painted orange for ease of spotting. A lifeboat arrived after about twenty minutes by which time two people were in need of treatment for hypothermia.

A potentially lethal incident was **April 52/83**. On a crowded holiday beach, an outboard mounted on an inflatable was started in gear and in full throttle. The boat shot off, ejecting the would-be cox'n and proceeded to roar around in figures-of-eight and tight circles amongst the children with their surf-boards. It eventually ran up the beach and ground to a halt. Nobody was hurt. An almost comic incident but imagine the outcry if a young child had been chopped to pieces. Are all your Branch cox'ns qualified or competent? Are all the interlocks on your outboard working correctly?

## Equipment

This year there has been a large number of reports of demand valve failures. There is not sufficient data to point to any particular problem, but I think I would put money on lack of competent maintenance as a factor. DVs are the last thing that any DIY fan should experiment with. An annual service is recommended and unless you are one of the hardy frostbite brigade, now is a good time to encourage Branch members to get it done. Their lives must be worth a few pounds.

**June 62/83** was an equipment failure of a different kind. A diver was filling a cylinder when the pillar valve, complete with A-clamp and charging hose, blew out and hit him in the face. He suffered cuts and concussion . . . he was lucky that was all. The cylinder was an ex-military SABA set which had been converted for use with a standard A-clamp fitting as a single set. However, the thread in the new pillar valve was 80 thou undersize and the gap had been made up with PTFE tape. A real DIY solution.

## Rescue

Not all incidents are tales of woe and it is pleasant to record those where good practice is involved. **September 12/83** reported that a diver vomited and collapsed on surfacing. Breathing ceased and cardiac arrest was correctly diagnosed. EAR and CCCM were given with complete success and he has since made a full recovery. His original problem was diagnosed as hypoxia, probably as a result of vomiting. Well done the Diving Officer and divers from South Glamorgan BSAC!

## Lunatic Fringe

This year a cautionary tale of a come-and-try-it dive. **August 67/83** recounts the story of a diver on holiday abroad, who took a non-diver in to see what diving was all about. After some 18 minutes at 45m the diver suffered a DV hose failure, quickly decanting his tank. His 'I need air' signal was met by an indifferent shrug from his untrained buddy, who was thoroughly enjoying the dive. The diver carried out a free ascent, was picked up by the boat and taken to a chamber. Meanwhile, back at 45m, quite oblivious to his peril and with no watch, no depth gauge and no knowledge, the non-diver eventually ran out of air, surfaced and swam ashore where he was later found by the boat, unharmed!

I make no apologies at all for the next section which is a repeat from the 1981 Report and is still very valid and relevant. It is the **Seven Rules for Survival**, produced by George Skuse, a previous DIP Chairman:

- No. 1 Always dive with a buddy. Remain in close visual or physical contact. Remember the divers who died alone!
- No. 2 Stick rigidly to the practice of 'one up – all up'. Remember the diver caught alone on the shot line who stabbed himself trying to escape!
- No. 3 Dive under a surface market buoy at all times, even on wrecks, unless the buoy is a positive

hazard. Remember the lost divers who spent two hours in the water!

- No. 4 Always use an ABLJ. Remember the diver who drowned!
- No. 5 Only dive no-stop dives. Remember the divers who got their stops wrong!
- No. 6 If you must do stops, plan the dive beforehand and get someone else competent to check it. Plan the dive, dive the plan. Several did not!
- No. 7 Insist that trainees dive with Second Class divers or above. Remember the novice at 46m!

Finally, my thanks to all those who have submitted reports and especially to John Bingham, George Cairns and HM Coastguard who have all been regular contributors. If you have an incident to report, my address and the requirements are in the DIP Report or Headquarters will always pass them on.

Remember, anonymity is guaranteed; I only want to get at the facts to help others from your experiences."

#### Questions

**David Wybrow (S W Coach).** "I realise that anonymity is essential, but would it be possible to obtain a breakdown of incidents by region, as I feel that in my region there has been a larger-than-normal number of incidents?"

**Margaret Marks** "I am sure you will appreciate that producing this report takes a lot of time, and to further break

it down on a regional basis is yet another overhead of work. If the NDO thinks that it is really relevant, I am sure that it could be done."

**John Fox (RAFSAA)** "The incident of the pillar valve blowing out of the cylinder; I was the man doing the investigation into the accident, and subsequently the RAF has ordered a formal inquiry. Far from being a DIY job, the firm to which the Branch had submitted the bottles for test and conversion has admitted that they fitted the wrong valve."

**Bob Campbell (Divers Down)** "In view of the number of equipment failures that you have listed, do we have a mechanism for investigating what these failures are? I realise that it is difficult, as people tend to fiddle about with their equipment and that by the time anybody with a deeper understanding gets to the faulty equipment it has already been taken apart.

Perhaps we should ask people that, where they have had catastrophic failures, they should try to get in touch with somebody capable of making a competent investigation of the cause."

**Val Russell (Milton Keynes)** "In view of the number of problems with trios diving, should a stronger line be taken on this practice?"

**Margaret Marks** "Perhaps it should be one of the Seven Golden Rules. I think that the lesson we learn is that so many incidents occur when diving is in trios; who is looking after number three?"

## APPENDIX 1

### STATISTICAL SUMMARY OF ACCIDENTS AND INCIDENTS

ITEM	1979	1980	1981	1982	1983
Incidents reported	120	151	216	149	142
Incidents analysed	114	148	203	148	142
British incidents	105	135	190	126	126
Incidents abroad	9	9	8	10	9
Location unknown	0	6	5	12	7
BSAC Members	76	106	160	108	112
Non BSAC Members	14	22	9	15	6
Membership unknown	24	17	33	26	24
National Snorkellers Club	0	3	1	0	0
Total fatalities	13	13	12	9	9
BSAC fatalities	5	6	5	6	7
BSAC Branch diving	4	2	4	5	6
ALL fatalities: solo	1	5	5	3	2
separated	6	0	5	3	3
underwater	9	7	9	8	9
on surface	4	5	3	1	0
3 or more in party	4	1	1	0	4
Decompression sickness	33	18	30	36	38
Recompressed	32	16	23	33	33
Depth reported	12	16	24	24	28
30m or deeper	6	14	19	14	18
Repetitive diving	2	6	7	8	3
Attempted recompression					
underwater	5	6	3	3	3
Commercial chamber	5	7	5	14	19
Service chamber	27	7	11	12	12
BSAC Members	13	12	23	18	22
Definitely NOT BSAC		4	2	8	2
Ascents	25	36	46	35	26
Emergency ascents	5	6	5	1	7
Aborted dives	20	11	30	11	17
Assisted ascents	9	8	11	7	9
Buoyant ascents	7	5	15	14	9

ITEM	1979	1980	1981	1982	1983
Coastguard alerted	34	24	37	27	47
Ambulance	8	4	10	8	11
Police	5	2	7	5	4
Lifeboat	21	14	16	10	21
Helicopter	22	12	31	22	26
Reported by HM Coastguard	35	19	21	17	19
Divers in the water	83	128	157	137	127
30m or deeper	19	30	18	18	39
50m or deeper		4	5	2	4
1m to 30m	42	42	76	43	44
On the surface	12	40	58	18	15
Involving boats	23	21	44	19	15
On land	5	17	6	4	1
Swimming pool		8	6	4	5
Bad seamanship	8	3	8	6	7
Injury caused	8	6	25	18	25
Weight/buoyancy involved	3	6	8	7	4
Solo diving	5	12	26	10	5
Separation	10	6	14	9	12
Resuscitation	11	8	7	5	4
Narcosis reported	2	6	5	1	2
Ears	4	5	14	7	10
Good practice involved		29	13	10	11

MONTHLY BREAKDOWN	ALL INCIDENTS	FATALITIES	BENDS
November	6	2	1
December	2	1	1
January	4	0	0
February	3	0	1
March	7	2	0
April	16	0	2
May	16	0	4
June	21	2	8
July	19	1	4
August	32	1	10
September	11	0	3
October	4	0	2
Undated	1	0	1

All the above reports are based on information received between November 1, 1982 and October 31, 1983

## MAJOR FACTORS

The figures represent the number of times, each occurred between 1980 and 1983.

Code	Item	1980	1981	1982	1983
1	Aborted dive	11	30	11	17
2	Assisted ascent	8	11	7	9
3	Buoyant ascent	5	15	14	9
4	Emergency ascent	6	5	1	7
5	Other ascent	6	15	2	1
6	Aural barotrauma	5	14	7	10
7	Pulmonary barotrauma	5	3	1	2
8	Boat trouble	19	29	19	15
9	Decompression sickness				
	– not recompressed	3	5	1	2
10	Recompressed in water	6	3	3	3
11	Recompressed in chamber	13	26	32	33
12	Ambulance	4	10	8	11
13	Coastguard	25	37	27	47
14	Helicopter	12	31	22	26
15	Lifeboat	14	14	10	21
16	Police	2	7	5	4
17	FATALITY	13	12	9	9
18	Good practice involved	30	13	10	11
19	Illness	4	15	2	11
20	Injury	6	25	18	25
21	Lost diver(s)	23	21	15	21
22	Rescuer	11	5	4	0
23	Rescued	24	33	22	34
24	Resuscitation	8	7	3	4
25	Unconsciousness	9	1	5	7
26	Embolism	2	1	3	0
27	Pressure accident	3	52	54	47
28	A.B.L.J.	10	10	10	4
29	Breathlessness	2	4	4	8
30	Buoyancy/weight	6	8	7	4
31	Carelessness	9	28	16	14
32	D.V. performance	9	3	6	10
33	Equipment – faulty	11	26	17	24
34	Equipment fitting	3	4	2	2
35	Equipment use	3	3	4	9
36	Equipment wear	1	0	0	1
37	Equipment inadequate	5	4	6	3
38	Fire/explosion	2	2	1	0
39	Foul air	0	2	0	1
40	Fuel	1	2	3	0
41	Hypothermia	1	6	0	3
42	Illness beforehand	10	5	4	4
43	Ignorance	4	5	6	11
44	Malice	1	2	0	1
45	Motor	6	18	6	7
46	Narcosis	6	4	1	2
47	Out of air	10	22	11	7
48	Pre-dive check	3	0	2	1
49	Repetitive diving	4	6	8	3
50	Ropes	0	0	2	2
51	Rough water	14	13	4	5
52	Bad seamanship	3	8	6	7
53	Good seamanship	0	0	0	0
54	Separation	6	14	9	12
55	S.M.B. absent	9	12	8	6
56	S.M.B. inadequate	5	5	2	5
57	Solo dive	12	26	10	5
58	Three diving together	4	13	7	8
59	Training drill	4	5	4	3
60	Trainin inadequate	4	3	11	16
61	Sharing	1	9	7	4
62	Deep dive (30m plus)	34	23	18	30
63	Low vis. underwater	1	1	3	1
64	Disregard of rules	9	24	14	20
65	False alarm	5	2	2	2
66	Cold	5	6	7	8
67	V.V.D.S.	4	10	3	2

## SUMMARY REPORTS

Each of the following reports is set out in a standard way: month, serial number, precis, membership, qualification, organisation of dive type of dive, where – country/water, depth in metres (*italics*), and a set of numbers which indicate an analysis of the major factors in accordance with the key provided in the report.

### KEY

#### MEMBERSHIP:

B = BSAC, I = Independent, O = no organisation.  
C = commercial, N = National Snorkellers Club.

#### QUALIFICATION:

O = none, S = Snorkel, 3 = Third Class, 2 = Second Class,  
1 = First Class, Inst = Instructor.

#### ORGANISATION OF DIVE:

C = Club/Branch, P = Private, O = none,  
Comm = commercial, H = holiday.

#### TYPE OF DIVE:

B = boat, Sh = shore, Sn = Snorkel, D = drift,  
T = training drill, O = none.

#### LOCALITY:

H = home, A = abroad, F = freshwater, S = sea, L = land,  
P = Swimming pool

#### DEPTH IN ALL THE ABOVE:

In Metres (*Italics*), X = UNKNOWN OR NOT RELEVANT.

**UNDATED 70/83.** DV failure initiated an emergency ascent from 22m during which a diver was thought to have inhaled water. Unconscious and not breathing on the surface the diver responded to EAR but later complained of shoulder pains. Recompressed. X.X.X.Sh.H/F. 22.4.11.12. 13.23.24.24.27.32.33.54.

**November 2/83.** Sharp object penetrated diver's knee during dive in thick weed. B.3.C.Sh.T.H/F.4. 20.66.

**November 4/83.** Fatality. Buddy noticed victim had allowed DV to fall out of his mouth. Later declared dead despite EAR/CCCM by buddy and other divers. Cause unknown. B.3.C.BT.A/S.42 17.17.24.62.

**November 5/83.** Fatality. A woman diver, one of a trio, became separated in very low visibility. Subsequent search located body without DV in place. Previous ear problems reported. B.X.C.S.H/F.13.12.16.17.54.58.63.

**November 14/83.** Divers DV supplied him with air/water mix at 34m. This ascent became uncontrolled due to large amount of air which became lodged in his abdominal cavity presumably from swallowing the air/water mixture. Recompressed and air removed subsequently in a hospital. B.2.C.Sh.H/F.34.1.3.11.12.19.23.27.32.62.

**November 18/83.** A diver became breathless during ascent from 20m and inflated ABLJ causing buoyant ascent. Unconscious on the surface, belching air. Chest pain which disappeared after two days. X.X.X.Sh.H/F.20.3.19.23.25. 28.29.

**November 21/83.** Outboard engine gearbox failure. B.I.C. B.H/S.X.36.45.

**December 1/83.** Fatality. Woman diver, part of a trio, became separated in a tunnel system and went in wrong direction. Later found drowned. B.2/I.C.Sh.H/F.20.16.17. 21.47.54.58.

**December 72/83.** Bend after a series of dives over several days outside the rules for the BSAC tables. Time spent at less than 9m between dives was ignored for decompression purposes. Also a morning 50m dive conducted 12 hours after the previous evenings's dive was considered as a first dive of a series and not as a 4th dive of a series as it should have been. X.X.X.X.A/S.50.9.27.43.49.57(?). 60.62.64.

**January 15/83.** Divers carried out assisted ascent after DV free-flowed. Rescuer noted the large amount of bubbles in the water (see also January 16/83) and the problems this caused with visibility. B.2.C.Sh.H/F.15.1.2.18.23.32. 33.61.

**January 16/83.** Assisted ascent after DV free flowed. The diver rescued noted afterwards that although both had octopus rigs neither thought to use it, communication was impossible because of the bubbles in the water (see also January 15/83) and control of ascent rate was difficult even though both were experienced divers. B.I.C.Sh.H/F.34.1.2.18.23.32.33.46.61.62.

**January 20/83.** Dive boat on an off-shore reef about to head back noticed two divers on the surface, later found to be their own, who had been overlooked when checking that all divers had returned. No SMB's used and, apparently, no log sheet. B.X.C.BT.A/S.22.21.31.55.

[DIP Comment - the use of a dive log sheet would have prevented this. A commendably honest report, however].

**January 25/83.** Outboard propellor fell off. Divers used flare to alert assistance. B.X.C.B.H/S.8.13.14.18.23.45.

**February 17/83.** Diver carried out emergency ascent after running out of air at 30m. Helicopter lift to recompression chamber. X.X.X.Bt.H/S.30.4.11.13.14.27.31.47.62.

**February 39/83.** Diver collapsed under hot shower after dive to 36m in water at 4°C. B.3.C.Sh.H/F.36.5.19.41.62.66.

**February 41/83.** Diver in dry suit but no gloves had to be rescued after suffering from hypothermia. B.3.C.Sh.H/S.10.1.4.18.19.23.37.41.66.67.

**March 27/83.** Ruptured ear drum during octopus game. B.X.C.Sn.H/P.6.20.27.

**March 28/83.** Divers spent 15 minutes at 35 to 42 metres without stops after misreading depth gauge. No ill effects. B.2/I.C.B.A/S.42.35.62.

**March 29/83.** Two separate engine failures during a Boat Handling Course lead to a 12 mile tow in worsening weather. B.I.C.B.H/S.8.13.33.45.66.

**March 30/83.** Diver suffered from cold and exhaustion. No details. B.X.X.H/F.29.66.

**March 38/83.** Double fatality. The three divers involved were part of a Branch group diving from a hardboat. In anticipation of a deep dive in the afternoon all three undertook a dive to not more than 9 metres in the morning. [D.I.P. note - this is not good practice] Diver A was Third Class, B a novice who had done 'two weeks of diving in previous years' and C, another novice, on his fifth dive. The second dive took place in a depth of 22-30 metres on a wreck. It is reported that no adjustment to divers' weights was made between these dives. When C reached 70ats of air, A indicated that they would ascend. C made several attempts to ascend without success and was nearly out of air. A partially inflated C's ABLJ and A carried at a controlled ascent except for last 10m. A and B did not surface and could not be found. [Branch policy of always venting an ABLJ before ascent is suspect if not combined with careful weight adjustment.] [There were several conflicting reports of this incident - this is an attempt at extracting the bare facts].

B.3/S/S.C.B.H/S.30.2.13.14.15.16.17.30.35. 47.58.60.62. See also June 68/82.

**March 40/83.** Engine failure lead to four divers swimming ashore and remainder paddling inflatable back. B.X.C.B.H/S.8.13.18.33.45.

**March 43/83.** Burst ear drum during pool training. B.O.C.T.P/H.6.20.27.

**April 31/83.** Divers suffered dizziness, 'pins and needles' and disorientation after a series of three dives well inside the Tables. Recompressed. One report described diver as 'no longer a fit, young man'. B.3.C.B.H/S.20.11.12.27.66.

**April 32/83.** Diving party split into two groups. First group returned and went off to the local pub. Second group returned and later alerted Coastguard to 'missing' first group. Lifeboat put on standby. B.X.C.B.H/S.13.15.31.65.

**April 33/83.** Solo diver, using decompression meter only, spent about 25 minutes at around 140 feet using SMB with 120 feet of line. Began ascent when air reached 'reserve level' and stopped for a 'short while' at 30 feet until air ran

out. On surfacing he had lost his boat and was picked up by a passing yacht. Shoulder pain developed. He located his boat, returned to harbour and collected another cylinder. He went out again and down to 60feet to carry out re-entry decompression. There was no diving flag and the cover boat was some distance away when another power boat became entangled in his SMB line, wrenching his arm and fingers. Abandoned dive and sought recompression. B.3.P.B.H/S.42.1.10.11.27.31.35.43.47.49.56.57.60.62.64.

**April 34/83.** BSAC branch divers rescued in Force 11 gale. Lifeboat capsized on its way to assist. No branch report. B.X.C.B.H/S.13.14.15.21.23.31.51(!).

**April 35/83.** Branch boat rescued an inflatable which could not start its engine plus a diver without fins stranded on a nearby rock. The latter had gone into the water to put his fins on and got into difficulties. B.X.C.B.H/S.8.13.23.35.

**April 36/83.** Hired fishing boat began to sink and was beached. B.X.C.B.H/S.8.13.14.15.33.

**April 37/83.** Diver suffered tightness in chest, coughing and finally vomiting after a short, shallow dive. Towed ashore by buddy. Slight cynosis of lips noted. Symptoms lessened. Air remaining in cylinder considered to be tainted. B.S.C.Sh.H/S.12.18.19.23.39.

**April 42/83.** Diver knocked unconscious when he struck his head as he climbed into a hardboat. X.X.X.B.H/S.12.13.14.15.20.25.

**April 49/83.** Diver on second open water dive burst an ear drum at 8m despite reminder from Dive Marshal. B.S.C.B.H/S.8.16.20.27.

**April 52/83.** Inflatable outboard started in gear and at full throttle. The boat moved off, and threw out the cox'n and proceeded to move in tight circles and figures of eight in an area full of children with surfboards before running up the beach. Nobody injured. B.3.C.B.H/S.8.31.33.52.

**April 53/83.** Ruptured ear drum during 'D' test 7m dive B.O.C. Sh.H.7.6.20.27.59.60(?).

**April 66/83.** DV failure initiated shared ascent from 10m but mass of bubbles from free flowing DV interfered and diver made free ascent from 6m. B.3.C.Sh/T.H/F.10.1.2.4.33.61.

**April 110/83.** DV free-flowed during practice assisted ascent. Diver swallowed air/water mix causing severe belching on the surface. No apparent DV defect. B.2.C.Sh/T.H/F.20.2.33.66.

**April 137/83.** After a 50m bounce dive a diver became totally exhausted from towing large shot line buoy some 300m in Force 4 conditions back to hardboat. Rescued by snorkel cover when hardboat anchor fouled. Diver, after rescue, described as white and grey pallor, staring eyes, rasping breath and spitting *red or pink flecked foam*. Victim, who was the Dive Marshal, refused medical inspection. B.3.C.B.A/S.50.19.23.29.51.62.

**April 140/83.** Lost divers after confusion over boat cover responsibilities in a strong tide. B.X.C.B.H/S.8.21.23.45.

**April 142/83.** Fast buoyant ascent due to diver's confessed unfamiliarity with new direct feed on ABLJ. Diving with two other divers (attached to each with a buddy line) tried to dump air from the ABLJ but mistakenly continued to 'inflate' it. B.3.C.B.H/S.17.3.30.58.60.

**May 19/83.** Divers, without SMB, surfaced out of sight of cover boat after drift dive. Picked up by auxiliary coastguard after 2½ hours in the water. B.2.C.B/T.A/F.7.13.21.23.55.64.

**May 44/83.** A shot line became entangled around the leg of a descending snorkel diver. Rescued by divers monitoring his 7 metre test snorkel dive. B.O.C.Sh.H/F.23.59.

**May 45/83.** Demand valve failure. No more information. B.X.X.X.33.

**May 46/83.** Four divers experienced 'strong undercurrent' and surfaced a mile from their boat. Search involved local fishing boats, helicopter, lifeboat, minesweeper and coastal parties. Found an hour later. No S.M.B.? X.X.X.B.H/S.13.14.15.21.23.31.56(?).

**May 47/83.** Bend. Diver suffered stiffness in legs two days after a dive of 39 minutes at 20 metres of which only 25 mins was spent at maximum depth. Symptoms later moved to left shoulder. Recompressed. This diver has had a previous experience. - see July 93/82 - also inside the Tables. B.2.C.Sh.H/F.20.11.

**May 48/83.** One diver lost his fins in kelp and was helped to nearby rocks by buddy who then swam to a beach for help where he collapsed, exhausted. Background of borrowed equipment and dubious commercial training. O.X.P.X.H/S.8.1.23.27.60.

**May 50/83.** Snorkeller got into difficulties. Overweight, apprehensive and lost fins. Rescued by buddies. B.S.C. Sh.H/S.1.23.29.34.42.48.58.59.

**May 51/83.** Dry suit began to inflate when diver reached the surface. ABLJ restricted access to dump valve. Neck seal restricted breathing to the extent of stopping it. Breathing restarted naturally when seal released by other divers. B.X.C.B.H/S.23.25.28.29.34.

**May 54/83.** Diver injured hand pulling in buoy line. No details. B.X.X.X.X.20.35.

**May 55/83.** Diver suffered asthma attack on surface after dive. B.3.C.Sh.H/S.19.42.

**May 56/83.** Bend after dive to 52m for 25min. Did correct stops by RN Table 11 but spent extra 25 min at 6m 'to finish air'. Recompressed. X.X.X.B.H/S.52.11.27.62.

**May 57/83.** Novice on fourth open water dive did buoyant ascent from 96 feet when he ran out of air. Helicopter provided and diver recompressed. A very honest Branch report noted an inexperienced Dive Marshal, confusion over contents gauge units, no record of dive times or log kept. B.S.C.B.H/S.30.1.3.11.13.14.27.62.

**May 64/82.** Inshore lifeboat rescued two divers from the rocks. Two more managed to swim ashore. X.X.X.Sh.H/S.13.15.23.

**May 71/83.** Missed stops. Diving pair unaware of exact depth and duration of dive, and subsequent stops using SOS decompression meter inadequate. Dive thought to have been 47 metres for 17 mins. A dive, 4 hours later, planned to be less than 9m, was actually to 15m, the pair having swam away from agreed site! No symptoms but Vernon contacted. B.2.C.B.H/S.47.31.43.49.60(?)62.64.

**May 73/83.** Severe toothache after 34m dive. Filling displaced. B.X.X.B.H/S.34.19.27.

**May 80/83.** Snorkeller fell face first from 5m into flooded slate quarry. Shattered mask caused superficial grazes on face. B.2.C.Sn.H/F.20.35.

**June 6/83.** Diver went overboard and received injury to his foot after some 'skylarking' in a boat underway. Branch boat not insured. Legal proceedings. B.X.C.BT.H/S.X.8.20.52.

[DIP comment - BSAC Rule 28E refers and requires branches to take out Third Party insurance on their boats. They are not covered by the Membership Public Liability policy]

**June 23/83.** Recompression chamber alerted after diver complained of headache and later vomited. Diagnosed as migraine. B.3.C.Sh.F.15.12.13.19.65.

**June 24/83.** ABLJ slowly inflated itself at 21 metres. Diver carried out controlled ascent, dumping air. No fault found on stripping. B.S.C.X.S.21.1.4.18.28.33.

**June 26/83.** Snorkeller hooked his knife into a buoy line during a dive, trapping him underwater. Released unconscious and resuscitated. B.S.X.X.X.24.25.

**June 58/83.** A trio were diving as 30m. One diver signalled his intention to surface alone. Either he undid his weight belt or it came loose but on doing it up he entrapped the shot line. On finding himself snagged he inflated his ABLJ but this only worsened the problem. In trying to free himself with his knife he stabbed himself in the stomach. Found by his buddies and recompressed for embolism. Later diagnosed as shock and near drowning. B.X.C.B.H/S.30.1.3.11.20.23.27.50.54.58.62.64.

**June 61/82.** Bend. No detail. B.X.X.X.H/S.11.27.

**June 62/82.** Diver suffered concussion and facial injuries when the pillar valve on a cylinder he was filling blew out and struck him. Cylinder was ex-RN S.A.B.A. converted for use singly. The new pillar valve thread was 80 thou undersize, the gap having been taken up with PTFE tape! B.X.X.O.H.20.33.43.

**June 65/82.** 17 foot power boat capsized whilst Branch members were practising man overboard drills. Boat remained afloat but inverted rendering marine band and CB radio inoperable, prevented access to flares in cabin and concealed to the superstructure which had been painted orange for spotting ease. Lifeboat arrived after twenty minutes by which time two people were in need of treatment for hypothermia. B.X.C.B./T.H/S.8.13.15.23.52.

**June 68/82.** Fatality. During 30m dive, A gave B 'Up' and 'Something wrong' signals. A dumped all the air from his ABLJ. As ascent commenced B noted that A was finning erratically and breathless at 20m. A began to descend and B followed him down where he found him lying at the bottom with his DV out of his mouth. A resisted DV being replaced then went limp. Insufficient air in ABLJ bottle to inflate jacket (A had been using this air source for buoyancy compensation). B tried to lift A using his own ABLJ but lost his grip and ascended quickly alone. Body located by Naval SAR diver from helicopter as all Branch divers were up to no-stop times. B.3.C.B.H/S.30.1.3.13.14.17.21.28.29.30.54.62.

[DIP Comment - As far as possible buoyancy should be adjusted by adding or removing weights *before* the dive. The use of the EMERGENCY air in the ABLJ bottle is not recommended for buoyancy trimming. Venting the ABLJ at the start of the ascent added to his overweight problem. See also Mar 38/83].

**June 69/83.** Bend after a dive to 36m for 12 mins (no-stop time is 14 min). On the surface the victim first noticed a pain in the left side of his chest; after ten minutes numbness in the left leg followed by tingling and numbness in the back and legs. Recompressed. B.3.C.B.H/S.36.11.13.14.27.62.

**June 74/83.** Burst eardrum at 5 metres. No pain or discomfort just a 'hiss' in the ear on ascending following by vertigo and later bubbling noises and earache. B.S.C.Sh.H/F.5.6.20.27.

**June 75/83.** Burst eardrum after snorkel dive to 7m. Possible that ear was already infected. B.S.C.Sh.H/F.7.6.20.27.42.

**June 76/83.** Diver transferred to recompression chamber by helicopter. SAR report only. X.X.X.B.H/S.11.13.14.27.

**June 77/83.** Shared ascent after diver ran out of air returning to surface from a 40m dive. Neither diver had been to that depth before and this was this divers second 'out of air' in a week. D.O. reports that he has banned the diver from dives below 20m for his next 20 dives. B.3.C.B.H/S.40.2.31.47.54.62.64.

**June 78/83.** FATALITY. Lone diver in shallow pond recovering golf balls. Suspected heart attack. Help called by his 12 year old son 2 hours later. B.X.P.Sh.H/F.17.19.25.57.64.

**June 79/83.** Two exhausted divers pulled from surf by fishermen. Inshore lifeboat alerted. X.X.X.Sh.H/S.13.15.23.51.

**June 81/83.** Diver did 20min at 7 to 8m followed by 11 min at 20m. Suggestion that second dive was actually 15 min at 26m. Heavy exertion before first dive, 2m depth gauge error, overweighted leading to more exertion. Initial skin rash ignored and recompression not sought for 24 hours when symptoms became more obvious. B.S.C.Sh.H/F.20.11.27.29.

**June 87/83.** Diver lifted by helicopter to recompression chamber. SAR report only. X.X.X.B.H/S.11.13.14.27.

**June 89/83.** Diver with previous history of ear problems complained of pain in the ear after 32m dive. Carried out second dive to 9m. The following day he went to his local hospital and was transferred to a recompression chamber

for treatment. Told not to dive again. B.X.C.B.H/S.32.6.11.12.20.27.62.

**June 100/83.** Diver reported niggle in right elbow; later of light headedness and indefinable woolly feeling in the legs. Recompressed. Dives over two days were just inside Tables but combined with a 'heavy night' and little sleep. B.2.C.B.H/S.36.11.27.

[DIP comment - lack of sleep and alcohol can increase the chances of a bend]

**June 111/83.** Two pairs of divers lost whilst boat trying to release anchor caught on bottom. With wind against tide (1 knot current) the 'White horses' obscured the two small SMB's (one gallon 'squash' containers) VHF used to alert coastguard. Helicopter called out. B.2.C.BD.H/S.20.8.13.14.21.23.51.56.

**June 9/83.** Branch boat. 17ft aluminium hull, sank after flooding through unplugged transom engine mounting holes. B.X.C.B/T.H/S.X.8.52.

**July 82/83.** Diver recompressed after developing skin bend symptoms. His dives (20m for 40 mins; 4 hour interval; 9m for 60 min) were inside tables but symptoms first occurred travelling home over 162m hill. B.X.C.X.H/S.20.11.27.

**July 83/83.** FATALITY. Spearfisherman failed to surface after dive to 12m in pursuit of a large conger eel. Hyperventilation suspected. Hearsay report only. X.X.X.B.H/S.12.13.15.17.57.

**July 84/83.** Mask shattered during straddle jump entry into pool. 5 stitches in finger. B.Inst.C.T.P.20.33/35.

**July 85/83.** Emergency ascent after D.V. failure. No details. B.X.C.X.H/S.4.32.33.

**July 86/83.** Diver developed decompression symptoms after dry dive in decompression chamber to 30m for 6 min. Conflicting reports of 'demands for a helicopter' and hysteria induced symptoms. I.X.C.Sh.H.30.11.27.62.

**July 88/83.** D.V. failure. Diaphragm housing came away at 28m. Diver changed to octopus valve. B.2.X.X.H.32.33.

**July 90/83.** Bend. Day 1 divers did bounce to 50m then 19min at 42m. Stops ignored 50m bounce. On day 2 both divers did 18 min at 48m (off the Table!) with stops for 17min bottom time. After this dive one diver complained of shoulder ache. By 4am next day this had worsened and re-compression arranged. Branch D.O. commented that the boat skipper 'must have thought we looked competent because he put us straight on the wreck with no check-out dive'. [DIP comment - how wrong he was! Here is a case of two very experienced divers deliberately cheating on Tables, ignoring symptoms and, incidentally, not working up to a deep dive. One diver had already had a bend several years earlier] B.I/Inst.C.B.H/S.50.11.13.27.31.62.64.

**July 91/83.** Branch divers rescued broken down fishing boat and four occupants. B.X.C.B.H/S.8.13.15.18.

**July 94/83.** After 8 min at 46m diver experienced loss of balance and disturbance of speech followed by paralysis of left side. Helicopter to chamber but symptoms had subsided. Not recompressed B.Sn.C.B.H/S.46.9.13.14.27.62. [DIP comment - what is a novice doing at 46m with a 3rd Class buddy!]

**July 95/83.** Helicopter scrambled after lighthouse keeper reports sighting diver on the surface being washed out on ebb tide. X.X.X.B.H/S.13.14.21.55.56.

**July 99/83.** Starter cord on outboard broke. Red flares alerted Coastguard and Pilot Boat sent out. Cord rewound and engine restarted. B.2.C.B.H/S.8.13.15.23.45.

**July 101/83.** Dory sank whilst underway; force 3. Some equipment lost. B.X.C.B.H/S.8.37.

**July 102/83.** Diver developed symptoms of cerebral bend 45 minutes after dive to 25m for 24mins. Recompressed Eventually admitted to drinking until 4am that morning X.X.X.H/S.25.11.27.64. [DIP comment - don't drink and dive!]

**July 103/83.** Assisted ascent after water entered demand valve. B.X.X.X.2.32.33.

**July 115/83.** During a 'D' test, a diver sensed a 'bang' in the ear followed by vertigo. Ear bleeding on the surface combined with red in the whites of the eyes. Burst eardrum and mask squeeze. Recovered. B.O.C.B.H/S.7.6.20.27.60?

**July 116/83.** Cover boat lost sight of SMB whilst picking up other divers. Divers recovered by passing motor boat. B.X.C.B.H/S.31.21.23.

**July 127/83.** Mask squeeze on trainee with new mask. B.S.C.B.H/S.15.20.27.35.

**July 141/83.** Second stage hose parted from 1st stage causing immediate loss of air. Buddy came to rescue and initiated assisted ascent. B.I.C.B.H/S.11.2.18.23.33.61.

**August 8/83.** Diver injured shoulder when 200lb load broke away from lifting bag. Pain over next few days attributed to injury but spread to knee and knuckle. Recompressed. B.2./I.C.BT.H/S.14.11.20.27.

**August 11/83.** Branch inflatable rammed by fishing boat. B.X.C.B/T.H/S.13.44.

**August 60/83.** Diver dropped his torch, swam down to find it noting depth of 32m but lost contact with buddy. He then surfaced stopping at '10m for 2 minutes'. Numbness and pain in upper arm. Recompressed. B.X.C.X.H.32.1.11.27.54.60.62.64.

**August 67/83.** Diver A on holiday took non-diver B for a private 'come-and-try-it' dive. After 18 mins at 45 METRES(!), A suffered a DV hose failure but his 'I need air' signal was met with an indifferent shrug from his untrained buddy. A carried out a free ascent, was picked up by the cover boat and taken to a decompression chamber. He had pains in the left knee on arrival. Meanwhile B with no watch, no depth gauge (and no knowledge) ran out of air, surfaced and swam ashore where boat cover eventually found him. O.O.P.B.A/S.45.1.4.11.27.33.43.47.54.60.62.64.

**August 92/83.** Demand valve failure. No details. B.X.X.B.H/S.32.333.

**August 93/83.** Diver's weightbelt came undone and fell to seabed. He was able to collect it but subsequent ascent became too fast, current having prevented him refitting the belt. Chest pains led to ambulance being called and diagnosis of pulmonary barotrauma. Diving in a trio with two novices, one of less than ten dives experience. C.B.H/S.16.1.7.12.13.27.30.35/37.

**August 96/83.** Three divers surface 2 miles from covering hardboat. Helicopter and lifeboat search found divers after two hours in the water. B.X.C.B.H/S.13.14.15.21. (55?).

**August 97/83.** FATALITY. Untrained diver attempted to swim out to a yacht to examine a fouled propeller. He was wearing a wet suit jacket, weightbelt and aqua-lung. Weightbelt later found to be jammed and air turned off on cylinder. Seen to wave for help before submerging. Local lifeboatman reached body on the bottom but could not lift it. Later recovered by local diving club. O.O.P.Sh.H/S.8.15.17.43.60.

**August 104/83.** Divers separated and one reported missing. No detail. B.X.X.X.H/S.13.21.54.

**August 105/83.** Two divers reported missing. Helicopter scrambled, lifeboat launched. Divers found by fishing boat. Coastguard report only. B.X.X.B.H/S.13.14.15.21.23.

**August 106/83.** Helicopter, lifeboat and fishing boat in search for missing diver later found by a fishing boat. Coastguard report only. X.X.X.H/S.13.14.15.21.23.

**August 107/83.** After diver with 'light work' for 25 min at 30m (correct stops undertaken) a diver reported pains and numbness in the left leg. Recompressed. (Age - 46). B.I.C.B.H/S.30.11.27.62.

**August 108/83.** A cylinder with a working pressure of 200 bar exploded at 184 bar whilst being filled. The operator was seriously injured and required two operations to remove shrapnel from body and left eye. A wall was blown

out and the compressor written off. Steel cylinder, no known defects. O.X.Comm. O.A/L.20.33. [DIP Comment – photographs supplied with this report show that the victims limbs and torso were completely peppered with small fragments].

**August 109/83.** Spinal bend. Diver did 20 min at 36m with stop of 10 min at 10m(!). Five and a half hours later he did 25 min at 36m. No stop reported. Ten minutes later he suffered cramping stomach and chest pains, constricted breathing (the 'chokes'). Dive Marshal took him down to 10m for 13 minutes, half an hour after surfacing. Symptoms disappeared . . . temporarily. Later in the day they returned and he had difficulty walking. Recompressed X.X.X.H/S.36.10.11.27.31 or 60.

**August 112/83.** Coastguard alerted of diver being swept out to sea. Rescued by Fishery Cruiser. Coastguard Reporting only. X.X.X.H/S.13.21.23.

**August 113/83.** Helicopter, lifeboat and Coastguard search for missing diver. Recovered safe. O.X.P.B.H/S.13.14.15.21.23.

**August 114/83.** Dry suit inflation hose came detached at suit end. Crimping at nozzle/hose interface inadequate. Diver carried out buoyant ascent. Unharmed. B.2.C.Sh.H/F.11.3.33.67.

**August 118/83.** Diver impaled his ankle on a metal spike amongst kelp. Infected wound. Hospital treatment. B.S.C.B.H/S.15.20.

**August 119/83.** Missed stops. A 3rd class dive leader and a novice surfaced after some 30 mins at 30m without stops. Dive Marshal instructed them to carry out re-entry decompression. No after effects. Report notes that neither diver 'had little comprehension of the reasons for stops or how to use the Tables' (!). B.3.C.B.H/S.30.10.31.43.60.62.64.

[DIP note – an example of a dive outside the capabilities of the divers and a serious error by the Dive Marshal in using re-entry decompression, which is dangerous. Who signed up the leader as fit to be a 3rd class diver?]

**August 120/83.** Assisted ascent from 25m after DV failure. Helicopter lift to hospital for treatment of shock and hypothermia. X.X.X.H/S.25.2.12.13.14.41.66.

**August 121/83.** Three divers carried out a morning dive to 9m. Later in the day they spent 20 min at 30m, without stops, ignoring the penalty from the first dive. Further 30m and 32m dives on next days. One diver then suffered 'pins and needles' pains in the legs. Spinal bend diagnosed. Recompressed. B.2.C.X.H/S.30.11.27.43.60.62.

[DIP note – 9m dives undertaken before other dives MUST be included in the calculations and DO count for that purpose. See 'Decompression Workbook'.]

**August 122/83.** Coastguard advised of missing diver. Helicopter scrambled and lifeboat launched. Diver found. X.X.X.B.H/S.13.14.15.21.23.

**August 123/83.** Diver ran out of air. No detail. B.X.X.H/S.47.

**August 124/83.** Diver ran out of air. Same Branch, same day as 123/83. No detail. B.X.X.H/S.47.

[DIP Comment – this Branch needs to look at its training]

**August 128/83.** Decompression incident involving recompression. No detail. B.X.C.X.H/S.11.27.

**August 130/83.** Buoyant ascent after DV let in water. Ambulance transfer to recompression chambers but not recompressed. DV found to be in a 'defective condition . . . exhaust valve incapable of sealing effectively . . . valve fitted is too large'. B.Sn.C.B.H/S.32.3.12.13.29.32.33.62. [DIP comment – a novice with a 3rd class dive leader at 36m with an improperly maintained DV – an accident looking for somewhere to happen!]

**August 131/83.** Diver suffered dizziness and vomiting after exceeding 70 foot no-stop time by two minutes. Helicopter lift to chamber. No branch report. B.X.C.X.H/S.22.11.13.14.27.58.64.

**August 132/83.** Three divers anchored their inflatable and all went in together. One had problems with his mask and surfaced alone. During the few minutes it took him to sort it out he was swept away by the tide and in the poor visibility lost sight of the boat. Picked up by fishing boat after 20 minutes. X.X.X.B.H/S.13.21.23.54.58.64.

**August 133/83.** Diver flown to chamber after 25 minutes at 37m (11 mins in excess of no-stop time!) Recompressed. X.X.X.H/S.37.11.13.14.27.62.64.

**August 134/83.** Cover boat lost sight of one SMB and divers beneath it were picked up by a fishing boat. Another SMB came adrift from its line and was followed downstream by the cover boat. After twenty minutes the Coastguard were informed and the missing divers picked up by another boat. B.2.C.B.H/S.13.21.23.31.56.

**August 135/83.** Two divers in an inflatable both went in together. One surfaced with DV problems, the other elected to continue the dive on the anchor line. However, the current was too strong and he had to let go but continued the dive downstream. Surfaced out of sight of the boat and swam ashore. Helicopter and lifeboat called out. B.X.P.B.H/S.13.14.15.21.32.33.54.55.57.64.

**August 143/83.** Perforated Ear Drum. Novice diver gave no sensible responses to signals on reaching bottom. Dive leader brought him to the surface where it was seen he was bleeding from his nose and ear. Doctor noted signs of previous infection in the ear. Novice had not thought important previous ear trouble whilst pool training. B.O.C.B.H/S.20.1.6.20.27.42.60(?).

**September 10/83.** Helicopter search after two divers reported missing. Divers swam ashore. Coastguard report only. X.X.X.B/T.H/S.X.13.14.21.

**September 12/83.** Diver vomited and collapsed after surfacing. Breathing then stopped and cardiac arrest diagnosed. EAR and CCM given successfully. Hypoxia diagnosed. Diver has made full recovery. B.3.C.B/T.H/S.23.12.18.19.24.25.

**September 13/83.** A diver became entangled in a shot line at 46m apparently under the effects of nitrogen narcosis. On being released he decided that because of the heightened effects of narcosis 'a buoyant ascent was the only practical course'. He slipped his weight belt but suffered no after effects. B.X.C.B/T.H/S.42.3.23.46.50.62.

**September 98/83.** Aluminium assault craft with 8 occupants swamped in heavy seas. Coastguard alerted using CB radio and flares. Lifeboat and helicopter launched. Crew safely swam to shore but boat and engine a total loss after being smashed on rocks. The dive party, strangers to the area, did not know of dangerous overfalls in the area of operation at certain states of tide and weather. Also the boat cox'n was unable to leave the dive area as the sea conditions worsened, as he was unable to recall the two pairs of divers down. They were not using SMBs! B.2.C.B.H/S.X.8.13.14.15.43.51.52.55.

**September 117/83.** Burst Ear Drum. No details. B.X.X.T.H/P.6.20.27.

**September 125/83.** Bend after 12 mins at 120 feet and 14 min at 140 feet within half an hour. No stops! Numbness in lower limbs, unable to stand. Recompressed. X.X.X.B.H/S.43.11.27.62.64.

**September 126/83.** Diver hit by buoy thrown from boat. No detail. B.X.X.B.H/S.20.52.

**September 129/83.** Bend. No detail. B.X.X.H/S.11.

**September 136/83.** Outboard failed to start with diver on his own in the water. Coastguard alerted who called up a lifeboat, two fishing boats and a Sealink ferry. Divers restarted engine. B.X.C.B.H/S.13.15.21.23.33.45.54.

**September 138/83.** Symptoms of an ache in left shoulder and 'pins and needles' in left leg after a 20m dive with possibility of a fast ascent after buddy lost his weightbelt. Symptoms ignored. Undertook further dive next day. Felt sick and developed ache in left arm. No action taken.

Following day ache in both shoulder blades, both knees and face itching. Recompressed. Further symptoms the next day led to another recompression. B.2.C.B.H/S.20. 3.11.64.

**September 139/82.** Top joint of a diver's thumb was cut off when it was trapped against a roller, under a chain, holding a 15 cwt anchor which had suddenly dropped when a wire parted. B.2.C.B.H/S.20.

**October 3/83.** Bend. Symptoms appeared after series of four 80 to 100 ft dives spread over three days using USN tables. Close to no-stop times but aggravated by alcohol and exertion. B.2.C.BT.A/S.27.11.27.64.

**October 7/83.** Inflatable dropped anchor alongside an SMB. Anchor narrowly missed divers beneath. X.X.X. BT.H/S.X.43.52.

**October 22/83.** A novice complained of ear pain during 'A' test. Instructor then explained about ear clearing! Novice burst ear drum trying to clear ear vigorously. B.O.C.T. H/P.4.6.20.27.60.

**October 59/83.** Bend and recompression after omitting 15 minutes of stops. Diver admitted to regularly 'pinching' on the Tables but previously he escaped effect. B.X.C.X.H/S.24.11.27.64.

**UNDATED 70/83.** DV failure initiated an emergency ascent from 22m during which a diver was thought to have inhaled water. Unconscious and not breathing on the surface, the diver responded to EAR but later complained of sholder pains. Recompressed. X.X.X.Sh.H/F.22.4.11.12. 18.23.24.25.27.32.33.54.

#### HISTORY OF DIVING FATALITIES

YEAR	MEMBERSHIP	BSAC DEATHS (NON-BSAC)	
1959	2,615	1	
1962	5,023	1	
1963	5,255	1	
1964	5,571	2	
1965	6,813	3	(0)
1966	7,979	1	(4)
1967	8,350	1	(6)
1968	9,241	2	(1)
1969	11,299	2	(8)
1970	13,721	4	(4)
1971	14,898	0	(4)
1972	17,041	10	(31)
1973	19,332	9	(20)
1974	22,150	3	(11)
1975	23,204	2	
1976	25,310	4	
1977	25,342	3	
1976	27,510	8	(4)
1979	30,579	5	(8)
1980	24,900	6	(7)
1981	27,834	5	(7)
1982	29,590	6	(3)
1983	32,177	7	(2)

#### INCIDENT REPORTS

If you would like to add to, correct or place a different interpretation upon any of these incidents, please put it in writing and send to the address below.

For new incidents, the minimum information that is of use consists of:

- Date of incident
- Name of victim(s)
- Vicinity of incident
- Nature of incident

All of this can be briefly stated on a Preliminary Incident Report Card. These are circulated by HQ to branches or can be obtained from the address below.

Much more use is the greater detail that can be set out on an Incident/Accident Report Form and one is sent out to

all those who send in a Preliminary Incident Report Card.

COMMANDER M. R MARKS RN  
MILBURY COTTAGE  
24 SWANAGE ROAD  
LEE-ON-THE-SOLENT  
HANTS PO13 9JW

#### WHAT IS AN INCIDENT?

Any event involving divers or diving equipment in, or out of the water where the diver is killed, injured or subjected to more than normal risk.

#### NAMING NAMES

Information obtained on incidents is treated confidentially and despite frequent requests at the DO's Conference names are *never* quoted. The only exception to this is where an act of rescue or saving life merits recognition.