The British Sub-Aqua Club

National Diving Committee Diving Incidents Report

2010

Compiled by

Brian Cumming

Diving Safety and Incidents Advisor

Published by The British Sub-Aqua Club in the interests of diving safety

Introduction

This booklet contains the 2010 Diving Incidents Report, produced by The British Sub-Aqua Club (BSAC) in the interest of promoting diving safety. It is important to note that it contains details of UK sports diving incidents occurring to divers of all affiliations, plus incidents occurring worldwide involving BSAC members.

The 2010 'Incident Year' ran from 1st October 2009 to 30th September 2010.

Report Format

The majority of statistical information contained within this report is also shown in graphical form. Please note that all statistical information is produced from UK data only and does not include Overseas Incidents unless noted as 'All Incidents'.

The contents of this report are split into an overview of the year, and then the details of nine incident categories plus some historical analyses. The various sections can be found as shown below:-

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Within each category the incidents are listed in the order of their occurrence, not necessarily that of Incident Reference. They are laid out in the following form:

MONTH/YEAR OF INCIDENT ***INCIDENT REF.***
Brief Narrative of Incident...
....

The nature of many diving incidents is such that there is usually more than one cause or effect. Where this is the case the incident has been classified under the more appropriate cause or effect. For instance an incident involving a fast ascent, causing decompression illness, will be classified under 'Decompression Incidents'.

Brian Cumming,
BSAC Diving Incidents Advisor,
January 2011

Acknowledgements

Data for this report are collected from several different sources. I would like to extend my thanks and appreciation to the following for their assistance in its production and in ensuring its completeness:

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Jim Watson for invaluable HQ support

Dr. Yvonne Couch for proof reading this report

and, in particular, all of those divers and other sources who have taken the trouble to complete Incident Reports and share their learning experience with others.

Overview

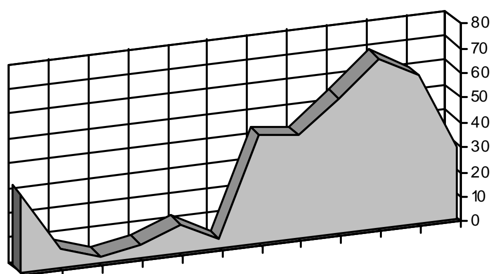
2010 has followed the pattern of recent years in terms of the number of reported incidents. 364 UK incidents have been recorded and this is in line with the last few years where the average has been somewhat under 400.

This year saw the presentation of the incident report move from the Diving Officers' Conference which was typically in early December to the Diving Conference in mid February. This extension of preparation time allowed us to extend the period during which we would accept incident information for the report. In the past the cut-off date was mid October; this year the same cut-off was announced but because of the additional time available reports that arrived up to the end of November were accepted. There was concern that this extension would distort the figures when comparisons were made with previous years. To address this a record was kept of those 'additional' reports so that the effect could be quantified. In the end only twelve more reports were added in this period and, as a result, it was considered that the effects of this would be negligible. These twelve reports were included and the analysis was completed as in previous years.

Number of reported incidents

The distribution of reported incidents by month is shown in the following chart and it follows the normal pattern, with 74% of the dives taking place in the summer months. This is slightly higher than the average of previous years but this difference is not thought to be significant.

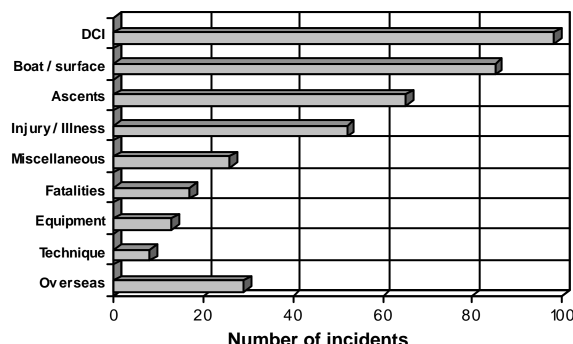
Incidents by month



Incidents by category

The incident database assigns all incidents into one of nine major categories, and the following chart shows the distribution of the 2010 incidents into those categories.

Categorisation of the year's incidents



As in all previous years (except 2007) the largest category relates to cases of 'Decompression illness' (DCI). DCI cases saw a dramatic reduction in 2007 and it was hoped that this marked the beginning of a downward trend. However, 2008 and 2009 saw a return to the average of recent years. This year the number of recorded cases was 98; lower than the previous two years and in line with a longer term trend of a general reduction from a significant peak in 2002. More detail on DCI incidents is given later.

The second largest category is 'Boating and Surface' incidents. This category mainly comprises of problems with boat engines (engine failure and out of fuel) and lost diver(s). This category had seen a very strong downward trend over previous years due to reductions in both types of incident. However in 2009 this number rose dramatically to levels not seen for eight years. This year the number of incidents in this category (85) is lower than 2009 but still higher than in recent previous years. This increase is entirely due to an increase in boating problems. The number of 'lost diver' reports is slightly down from previous years and indicates a slow downward trend in the number of this type of incident.

The third category is 'Ascents' where divers have made an abnormal ascent but avoided DCI. This category has seen a steady decline in the number of recorded incidents since a peak in 2006. Prior to this date the number of incidents each year had been steadily rising. The major initiative that has been underway in recent years to address poor buoyancy control seems to have had a significant effect and this year's total of 65 incidents is slightly up on last year but still indicative of a general improvement in this area. More on 'Ascents' can be found later in this report.

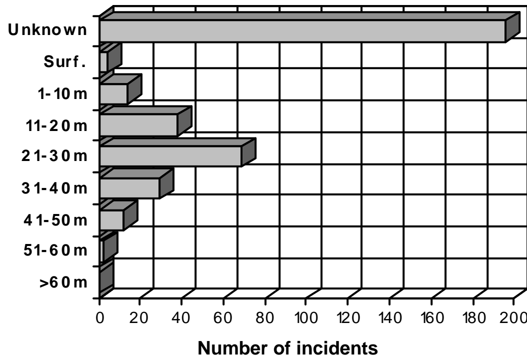
The fourth category is 'Illness and injury' and the bulk of this is thought to be cases of DCI. But these cases are reported through the RNLI and their reports do not specifically record DCI, they often just state 'Diver illness'. For this reason it is not possible to distinguish cases of DCI from other diver ailments. The number of incidents reported in this category each year has remained constant for the last twelve years at around 55 per year.

Although small in number 'Fatalities' are the most important category and these are also covered later in some detail.

Incident depths

The following chart shows the maximum depth of the dives during which incidents took place, categorised into depth range groupings.

Maximum depth of dive involving an incident

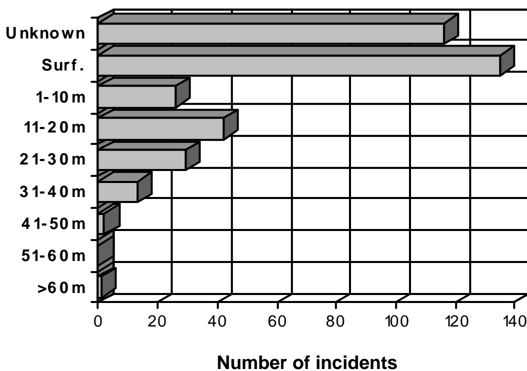


The pattern of depths in the 0m to 50m range is very similar to that normally seen and reflects the amount of diving that takes place in these depth ranges.
The number of incidents reported in the greater than 50m range is 2, much lower than in previous years. One of these incidents was a fatality which occurred during a dive to a maximum depth of 60m where the diver was using trimix.

BSAC advises that no air dive should be deeper than 50m, and that dives to 50m should only be conducted by divers who are appropriately trained and qualified.
The recommended limit for divers trained to Sports Diver standard is 35m and then only when they have received appropriate training for diving at this depth.
BSAC recommends that helium mixtures are used for depths deeper than 40m and that mixed gas diving should be to a maximum depth of 80m. Mixed gas dives should only be conducted when the diver holds a recognized qualification to conduct such dives.
See the BSAC website for more details of these and other diving depth limit recommendations.

The next chart shows the depths at which incidents started.

Depth at which an incident started

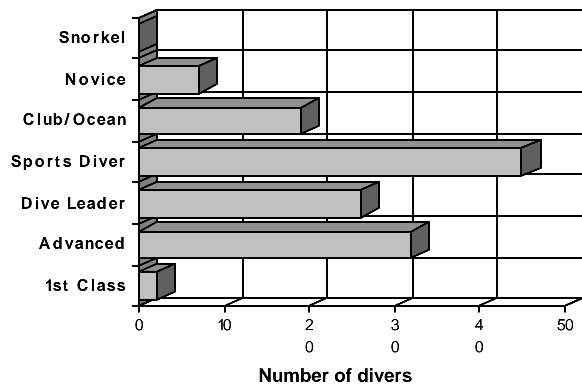


Inevitably the data are biased towards the shallower depths since many incidents happen during the ascent or at the surface. Critical among these are the DCI cases where almost always the casualty is out of the water before any problems are noted. This partially explains the large occurrence of 'Surface' cases as this includes divers with DCI who have left the water.
Other surface incidents involve boats and boating incidents and divers who are lost but on the surface.
There is one case shown in the >60m category that is not shown in the >60m category in the 'Maximum depth' chart, this is because the maximum depth of this particular incident was not recorded.

Diver qualifications

The next two charts show the qualification of those BSAC members who were involved in reported incidents.
The first looks at the diver qualification.

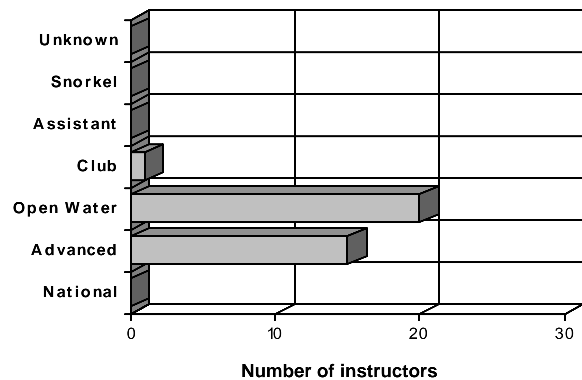
Qualification of the divers involved in incidents



These data are in line with the normal pattern of previous years and probably reflect the number of divers in these qualification grades.

The next chart shows an analysis of incident by instructor qualification and again it is consistent with previous years.

Qualification of instructors involved in incidents



The low number for 'Club' instructor almost certainly reflects the fact that this qualification is no longer part of the instructor development programme.

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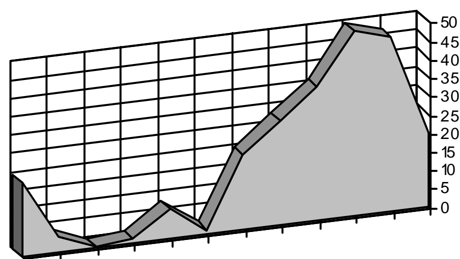
Divers' use of the Emergency Services

Divers' use of the emergency services shows a monthly distribution aligned to the distribution of all incidents, and is clearly correlated with the number of dives that are taking place.

235 incidents were reported to us by the Coastguard; this is entirely consistent with recent years.

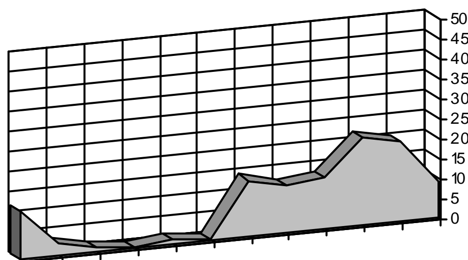
Incidents involving the UK Coastguard Agency - Monthly breakdown



Incidents involving HM Coastguard: 235

There were 107 incidents reported that involved the RNLI. Previous years had seen a steady decline in divers' need for lifeboat assistance. Last year saw this number jump upwards by over 30% to 134 incidents, a level not seen for over twelve years. This year's total is down from last year's high and much more in line with previous years. The RNLI's main involvement with divers involves assistance with disabled boats, searching for missing divers and the recovery of divers with DCI.

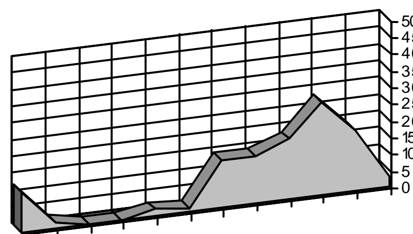
Divers' use of RNLI facilities by month



Incidents involving Lifeboats: 107

In 2010 112 incidents involved the use of helicopters. This number supports the suggestion made last year that incidents involving helicopter rescue are levelling out to a little over 100 per year.
In diving related incidents helicopters are mainly tasked to support searches for missing divers and to transport divers with DCI to recompression facilities.

Divers' use of SAR helicopters by month



Incidents involving helicopters: 112

Fatalities

17 fatal incidents occurred in the UK during the 2010 incident year. This is above the average of 15.8 fatalities per year over the previous ten years. However, comparisons of this nature need to be made with caution since a small change to such low numbers can make a big apparent difference to the result.
8 of these people were BSAC members. The ten year average for BSAC fatalities in the UK is 5.9 fatalities per year and thus, from a member's perspective, it has been an unfortunate year.
The factors associated with all of these fatalities can be summarised as follows:-

- Three cases involved divers who died of 'natural causes'. Two of these were heart attacks and the third was not specified. In two other cases it seems very probable that similar issues arose but there is currently insufficient information available to be certain of this.
- Ten cases involved a separation of some kind. Four of these cases occurred during the ascent from a dive when divers became separated; one of these cases involved the use of an alternative gas source. Two cases involved three or more divers diving together. Two cases involved divers in difficulties during a dive who made direct lone ascents to the surface (one from 60m). Two cases involved divers in difficulties during a dive where a separation occurred and one diver failed to surface. One case involved a diver who became tangled with a shot line during an ascent. One case involved a diver who was thought (incorrectly it subsequently transpired) by his buddy to have aborted the dive during the descent.
- Two cases involved rapid ascents and probable barotrauma.
- Two cases involved divers who ran out of breathing gas.
- One case involved a solo snorkel diver.

Often multiple causes were involved in an incident and with many of these fatal incidents there is currently insufficient information available to be clear about the exact chain of events and specific root causes. Often new information comes to light (from coroners' inquests for example) after the publication of the annual report. Such information is added to the incident database for future research purposes.

Diver age was highlighted last year as a feature of note in the year's fatal incidents. 8 (57%) of the 2009 fatalities involved divers over the age of 50. This year the number of fatal incidents involving divers over the age of 50 was again 8, equating to 47% of the 2010 fatalities. This is against a background of only 16% of the diving population being over 50 (from a BSAC UK site survey). The natural tendency is for health and fitness to decline with increasing age and the above numbers seem to indicate that divers need to pay more attention to these aspects as they grow older.

Unusually this year there were no fatal incidents involving rebreather divers, only one fatal incident involving a dive to a depth greater than 50m and only one death involving a solo diver. In previous years these factors were key elements of the fatality statistics.
Note; during the preparation of a fatalities analysis this year an error was found in the 1999 data. The report recorded 17 fatalities, but is was discovered that this included a double count of a fatality that had occurred in the previous year. A much later press report had been published and led to the belief that a separate incident had occurred. This error has been corrected and the chart on page 45, which shows the history of annual fatalities, has been amended accordingly.

Decompression incidents

The BSAC database contains 98 reports of 'DCI' incidents in the 2010 incident year, some of which involved more than one casualty. When these multiple cases are counted the result is 105 cases of DCI.

An analysis of the causal factors associated with the 98 incidents reported in 2009 indicates the following major features:-

29 involved repeat diving
23 involved rapid ascents
18 involved diving to deeper than 30m
15 involved missed decompression stops

Some cases involved more than one of these causes.

As stated earlier, some of the 'Injury and Illness' incidents are also thought to be DCI related.

Ascent related incidents

Although this year has seen a slight increase over last year 'Ascent' related incidents have fallen dramatically over the last four years and some of this decline is likely to be due to the focus that has been placed on this important area of diving skill. 65 cases of 'Ascent' problems have been recorded in 2010 and the majority of these were 'rapid ascents'. An analysis of these 'rapid ascents' (where the detail is known) is as follows:-

21%	Simply poor buoyancy control
19%	Panic / anxiety / rush for surface
14%	Delayed SMB problems
12%	Drysuit control malfunction/mis-use
9%	Weighting or weight related problems
9%	Regulator free flows
2%	Out of air / gas

These causal factors are very similar to those seen in abnormal ascents for many previous years.

It is certain that many other such cases have gone un-reported but it is anticipated that these root causes will apply to all uncontrolled ascents.

Many DCI cases have their roots in these problems; they have been recorded under the 'DCI' heading but the causal factors are often the same, so the actual number of abnormal ascents will be significantly higher than 65 cases. This year's DCI cases included 23 incidents where rapid ascents had taken place.

Conclusions

Key conclusions are:-

- The number of incidents reported each year in the UK seems to have levelled out at around 370 cases.
- The number of fatalities of BSAC members is 2 above the average of the previous 10 years.
- The number of fatalities of non-BSAC members is 1 lower than the average of the previous 10 years.
- Diver age and related health and fitness issues is emerging as a critical factor in this and recent years' fatalities. The average age of the subjects of this year's diving fatalities was 50.5 years (almost identical to 2009); the average age of the background diving population is 38.
- The deepest depth recorded in the incident database was 64m and the deepest depth involving a fatality was 60m; previous years have seen much greater depths than this reported.
- There were no fatalities involving rebreather divers. In recent years rebreather deaths were a significant proportion of the total and thought to be disproportionately high compared to the number of rebreathers in use.
- Only one death of a solo diver was recorded. Again, in recent years, solo diving fatalities have been disproportionately high.
- Incidents relating to boat problems (engine and fuel) have increased in the last two years.

As has been stated many times before, most of the incidents reported within this document could have been avoided had those involved followed a few basic principles of safe diving practice. The BSAC publishes a booklet called 'Safe Diving' (latest edition published in September 2010). which summarises all the key elements of safe diving and is available to all, free of charge, from the BSAC website or through BSAC HQ.

Remember you can never have too much practice and the further you stay away from the limits of your own personal capabilities the more likely you are to continue to enjoy your diving.

Please browse through the details in this report and use them to learn from others' mistakes. They have had the courage and generosity to record their experiences for publication, the least that we can do is to use this information to avoid similar problems.

Finally, if you must have an incident please report it using our Incident Report form, available free via the BSAC website or from BSAC HQ.
As always, your anonymity is assured – great care is taken to preserve the confidentiality of any personal information recorded in BSAC Incident Reports.

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Fatalities

October 2009 10/001

The emergency services were alerted when a lone spearfisherman failed to return to shore. An extensive search was conducted involving a helicopter, a lifeboat, other vessels and Coastguard rescue teams, but it was eventually called off due to very severe weather conditions. The diver's orange float and speargun were found but no trace of the diver. His body was found, washed ashore, eleven days later.

October 2009 10/003

A diver was recovered from the water after a 14 min dive to a maximum depth of 23m. She had become separated from her dive group and at one point during the dive she had become caught on the shotline at a depth of 5m. She was towed ashore, resuscitation techniques were applied and a pulse and breathing were restored. An ambulance and a helicopter attended; the casualty was airlifted to hospital but died six days later. The cause of death was severe hypoxic-ischaemic brain injury following water inhalation, pneumothorax and cardiac arrest.

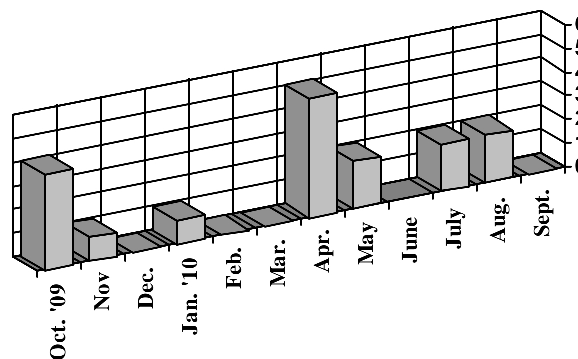
October 2009 10/002

Three divers were conducting a safety stop, on a shotline, at a depth of 6m. The leader of this group noticed a diver on the shotline below them in a horizontal position. Nothing seemed wrong and he focused his attention back to his buddies. He then noticed a diver above them, inverted, attempting to pull himself down the shotline. He ascended to assist this diver. The diver had air in his drysuit legs and could not right himself. Two of the divers helped him to regain an upright position and he was then able to vent his suit. During this time the divers sank back down to 11m. The diver who had been inverted then indicated that he was out of air. The leader of the three divers gave him his main regulator and deployed his alternative air source. However he was unable to detach the hose of this regulator from its clip due to the proximity of the other diver and he was taking in water through this regulator. At this point the buoyant diver's buddy appeared and the diver who was struggling with water in his regulator indicated to the buddy to give the buoyant diver his pony regulator; this he did and the buoyant diver seemed to be breathing normally. The diver who was struggling to breathe recovered his own main regulator and this resolved his problems. The buoyant diver indicated to his buddy that they should ascend, this they did with one of the group of three accompanying them. The diver who had donated his main regulator ascended normally with the second of his buddies. When the buoyant diver reached the surface he was seen face down with the shotline tangled around his head. The two divers with him removed the rope and lifted his face from the water; he was unconscious. They signalled an emergency to the boat, removed the unconscious diver's weights and one of the pair gave him rescue breaths. The unconscious diver was recovered into the boat, the emergency services were alerted and resuscitation techniques were continued. The casualty was taken by lifeboat to the shore where he was declared dead. Others involved in the rescue were placed on oxygen but no ill effects were reported. Second-hand reports of the post mortem indicated that the diver has suffered a cerebral arterial gas embolism.

October 2009 10/004

Two divers were 12 min into a dive at a depth of 50m when they became separated. Silt reduced the visibility and after a short search one of the pair surfaced. When the second diver failed to surface the emergency services were alerted. Police divers were called to assist and the missing diver's body was found and recovered 12 hours later.

UK Fatalities - Monthly breakdown from October 2009 to September 2010 incl.



November 2009 10/005

A diver developed problems at a depth of 30m. He was recovered to the surface and removed from the water. Resuscitation techniques were applied and the emergency services were alerted. The casualty was airlifted to a recompression facility but declared dead before any treatment could be given.

January 2010 10/060

After a training dive to a maximum depth of 10m for a duration of 55 min a group of four divers surfaced without problems after completing a safety stop. The group were approximately 15m from shore. One of the divers indicated that he had lost his weights. The lead diver told the others to return to shore and he would recover the weights. The lead diver descended to the seabed at a depth of approximately 2m and located the weights approximately 5-6m away. He recovered the weights and swam back along the seabed until in a depth of around 1.5m. At this point he came across one of the other divers on the seabed. The diver failed to respond to signals and was recovered to the surface where the lead diver signalled for assistance from the others. The casualty was recovered to the shore, his equipment removed and CPR conducted for 20-30 min until an ambulance arrived. The diver did not survive.

April 2010 10/061

A diver collapsed shortly after entering the water for a dive and before leaving the surface. The diver was recovered to the dive boat and resuscitation efforts were made. The diver was airlifted to hospital but did not recover. Two lifeboats were launched to assist. Initial indications were that the diver suffered a heart attack.

April 2010 10/063

A group of divers were diving from a charter boat on an underwater wall. One pair descended to 35m with no sign of the wall or the seabed. One of the pair deployed his delayed SMB but was noticed by his buddy to still be descending even though he was winding in the reel. He descended to a maximum depth of 48m before ascending past his buddy, in sight but out of reach, and continued directly to the surface. The diver was seen from the charter boat to surface and to start finning towards the boat. However, as the boat approached him the diver was not moving and he began to drift past the diver lift. A member of the crew jumped into the water and was able to get the diver onto the lift and recover him into the boat. Resuscitation attempts were made using oxygen enriched CPR. A lifeboat, which had been out on exercise, attended and a doctor onboard pronounced death.

April 2010 10/062

10 min into a dive on a wreck at 22m a diver indicated to his buddy that he was not happy. He removed his SMB reel from his BCD pocket but then was unable to unzip his other BCD pocket to remove his delayed SMB. His buddy deployed his own delayed SMB and both divers began to ascend. The buddy was concentrating on reeling in line and lost sight of the troubled diver and did not see him again until he surfaced to see him on the boat lift. The troubled diver had surfaced and signalled the boat which manoeuvred to recover him. The boat stopped short and the skipper threw the diver a line which the diver held on to. He was pulled onto the lift and recovered to deck level. Once at deck level the diver collapsed unconscious onto the deck. The diver's equipment was removed and resuscitation attempts were made whilst an emergency call was made to the Coastguard. The diver was transported by rescue helicopter to hospital but he did not recover. His equipment was inspected and found to be in good working order. A post mortem examination and Coroner's inquest found the cause of death to be a heart attack.

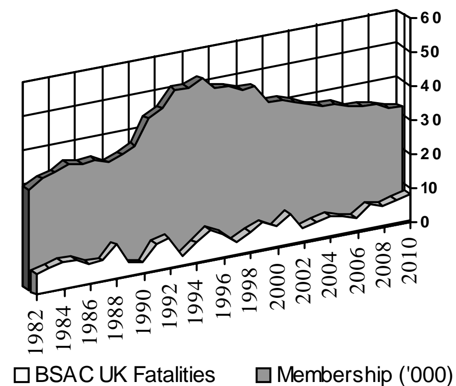
April 2010 10/064

A group of twelve divers were diving a wreck from a charter boat. The divers began entering the water before slack water. One pair swam to the shotline and the first diver to arrive descended below the surface to allow his buddy space to get onto the shotline. He watched his buddy grab the line between the shotline and the leader buoy but he remained on the surface. After two more pairs of divers had descended the shot the first diver ascended with some difficulty maintaining a grip on the shot due to the current. When he surfaced his buddy was no longer on the line, he then became tangled in the leader line and spent some time untangling himself. Once untangled he saw a single diver on the boat that he was certain was his buddy. The first diver then joined another buddy pair and undertook the dive. After the dive it became apparent that the buddy had not been on the boat and could not be found. The Coastguard was alerted and a search was initiated involving a helicopter, two lifeboats and other craft but the diver was not found. The missing diver was located the following day on the seabed close to the wreck. A subsequent press report stated that he had died of natural causes.

April 2010 10/065

A pair of divers descended a shotline to a maximum depth of 31m onto a wreck. At the bottom of the shotline one of the divers appeared confused and was not responding normally. The diver did not appear happy and began ascending back up the line and did not respond to signals. His buddy accompanied him up the line signalling for him to take it steady. The diver was pulling himself up the line breathing steadily but did not respond to signals or other communications. Just below the surface the diver stopped. He was still breathing but remained unresponsive. His buddy assisted him to the surface and called for assistance from the charter boat they were diving from. The diver was de-kitted by his buddy and recovered onto the boat with the assistance of the crew and resuscitation attempts were made including oxygen enriched rescue breaths. The diver was airlifted to hospital by helicopter but did not survive. A post mortem could not confirm the cause of death.

BSAC Fatalities against membership 1982-2010 (UK fatalities only)



May 2010 10/084

A group of eight divers were diving a wreck from a dive charter boat. One pair of divers had completed a 20 min of dive to a maximum depth of 30m. When one diver checked the other's air contents, the buddy indicated having 70 bar which was less than expected given past experience and he indicated to start their ascent. The pair jointly deployed a delayed SMB as previously agreed and began their ascent. As they approached 5m the first diver indicated that they should conduct a safety stop but his buddy continued straight on to the surface. The first diver surfaced shortly afterwards and his buddy shouted at him that he could not breathe and he saw him being sick. The diver swam towards his buddy, inflated both their BCDs and tried to reassure him whilst signalling for assistance to boats in the area. A RHIB carrying divers from another group responded and began resuscitation of the casualty whist his equipment was being removed. They then recovered the casualty into the RHIB and continued resuscitation efforts until a helicopter arrived. The helicopter transferred the casualty to hospital but he did not survive. The casualty's buddy was placed on oxygen and subsequently reported a tingling in his feet. He was subsequently airlifted to a recompression chamber as a precaution.

May 2010 10/087

5 min into a dive at a depth of 16m a diver found his buddy lying on his side with his mask half full of water. The diver recovered the casualty to the surface and after a struggle managed to recover the casualty into their charter boat with the assistance of the crew. Resuscitation efforts were made during the return to harbour where they were met by a doctor and ambulance crew. Resuscitation efforts continued for over an hour but the casualty did not survive. A lifeboat and helicopter were tasked to support.

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July 2010 10/140

After a 20 min dive to a wreck at 60m a diver surfaced rapidly and missed all required decompression stops. The skipper of the boat saw the diver come out of the water 'like a torpedo' and then fall back face down in the water. The diver was then seen finning to try and get back down, he then raised an arm to signal distress and then went motionless. The skipper positioned his boat beside the diver, lowered the stern lift, with himself on it, and used the boathook to pull the diver alongside. The diver grabbed the lift handle and his grip couldn't be released; this gave the skipper some difficulty in getting the diver onto the lift. The skipper cut off the diver's equipment and began CPR. The Coastguard was contacted, a rescue helicopter was scrambled and the diver airlifted to hospital but he did not recover. (Coastguard & media reports).

July 2010 10/170

A coxswain and group of twelve divers were diving as six buddy pairs on a drift dive between 20m and 30m. A delayed SMB from the last pair of divers was sighted in the vicinity of a fishing boat but there were no bubbles seen to be coming from beneath it. A second delayed SMB was seen close by and a diver surfaced beside it alone. A surface search was initiated for the second diver and the Coastguard alerted. The Coastguard tasked a helicopter and two lifeboats to support the search. Whilst the surface search was ongoing two divers from the group descended the first delayed SMB and located the missing diver at the end of the line. His regulator was out of his mouth and pressing the drysuit inflator produced no effect. Unable to recover the casualty the divers returned to the surface. Some time later a second pair of divers descended and recovered the casualty to the surface and helped recover the diver into a lifeboat. Resuscitation efforts were made but the casualty was pronounced dead on arrival at hospital.

August 2010 10/176

A pair of divers experienced difficulties at a depth of 15m and one of them failed to surface from the dive. The alarm was raised and a surface search was initiated by the Coastguard involving an SAR helicopter, a lifeboat and more than twenty other vessels. The diver's body was located underwater approximately 4 hours later.

August 2010 10/190

A student and her instructor were conducting training in 2m of water on a dive from the shore. Approximately 20 min into the dive the student was practicing a drysuit inversion recovery exercise when she accidentally knocked the instructor's regulator from her mouth. After recovering the regulator the instructor saw the student close to the surface; she appeared to be panicked and to have lost orientation. The student then descended again and at first appeared to have regained composure but then continued to fall backwards. The instructor noticed that student's regulator was missing and her arms were moving as if she was trying to locate it. The instructor recovered the regulator and presented it to the student twice but there was no response. The instructor raised the student to the surface using a controlled buoyant lift and shouted for help. Other members of the party responded, helped recover the student from the water and basic life support was started. One member of the group ran to the nearby Coastguard station for assistance. The Coastguard alerted an ambulance and rescue helicopter. An ambulance arrived and assisted with basic life support until the helicopter arrived to airlift the diver to hospital. The diver did not recover.

Decompression Incidents

October 2009 10/253

Portland Coastguard received a call from a dive boat advising that they were returning to harbour with a diver onboard who had symptoms of DCI. Coastguard helicopter R-106 was tasked to airlift the diver and he was met at the helicopter landing site by Poole CRT and a dive doctor and transferred by ambulance to Poole hyperbaric chamber for treatment. The boat was met when it returned to shore by Lyme Regis CRT. (Coastguard report).

October 2009 10/014

A diver conducted a dive with two buddies to a submarine wreck at a maximum depth of 36m for a dive time of 28 min. On reaching an agreed minimum remaining gas pressure and after deploying a delayed SMB the divers started to ascend. The subject diver noticed he was having difficulty maintaining neutral buoyancy and having to work hard to avoid a fast ascent. He experienced further difficulty maintaining a 5m safety stop and was starting to breathe heavily. A 3 min safety stop was completed and the diver surfaced but was unable to inflate his BCD because he had run out of gas and so had to orally inflate. Once back onboard the boat the diver reported feeling sick, tired and had a red rash on his right hand. He was put on oxygen and airlifted off by helicopter to a recompression facility where he received treatment. The diver subsequently reported that his previous ten dives had been in fresh water and he had not adjusted his weights for seawater. (Coastguard report).

October 2009 10/015

A diver conducted a 16m dive for 45 min duration using nitrox 32 and conducted a 3 min safety stop. Conditions were good but there was some underwater surge. After a surface interval of 3 hours a second dive was completed to 16m for a duration of 45 min again using nitrox 32 and with a 3 min safety stop. 2 hours after surfacing from the second dive the diver reported experiencing dizziness, nausea, a 'disoriented/disconnected feeling' and started to develop tingling in her left hand. Contact was made with a hyperbaric centre and advice was given for the diver to be placed on oxygen and attend hospital to be checked out. On attending hospital the diver was admitted overnight for observation and placed on oxygen. Improvement was seen in the morning and the diver was discharged. During the drive home over hills the diver again became unwell and advice was given to drive to a hyperbaric facility for treatment. The diver received three hyperbaric treatments which resolved most symptoms leaving only mild sensation abnormalities, which resolved fully after a week.

October 2009 10/016

A diver conducted two wreck dives in the same day. The first was to 40m for a duration of 36 min including 12 min of decompression stops. After a 2 hour 6 min surface interval the second dive was 30m for a duration of 46 min including 14 min of decompression stops. The sea state for both dives was reported as a moderate swell. Approximately 1 hour 30 min after surfacing from the second dive the diver started to notice a pain in the surface of her chest. Once back on land the diver noticed a mottled rash that was slightly itchy on her stomach, back and chest. The diver also had soreness and swelling in her breasts. She took two litres of water and two aspirin and noticed an improvement in symptoms within an hour. The rash and pain had disappeared 4 hours later and so the diver decided not to call for medical assistance. The following morning the diver noticed a slight ache in her shoulder that did not worsen; the diver associated this with picking up diving kit. The next day the ache was still present and the arm was noted to be weaker and the diver called the DCI helpline. A skin and lymphatic DCI was diagnosed and the diver was referred to the local A & E for neurological tests which proved normal. No further treatment was given. The diver was recommended to seek referral for a PFO test.

October 2009 10/010

A diver conducted a first dive to a depth of 42m for 35 minute duration. After a surface interval of 2 hours he conducted a further dive to 26m for a duration of 25 min to collect scallops. Once back in the boat he experienced a pain in his arm and was placed on oxygen. The Coastguard was alerted and the diver was airlifted to a recompression facility. He received recompression therapy. (Coastguard report).

October 2009 10/036

Three divers conducted a dive to a maximum depth of 20m for a total of 34 min. One of the divers had some difficulty initially in getting down and one of his buddies placed some rocks in the pockets of his BCD to help. Towards the end of the dive as the group approached a depth of 6m to conduct a safety stop the diver who had rocks in his BCD pockets lost control of his buoyancy and started to ascend. The diver was unable to prevent an ascent to the surface despite dumping air from his suit and BCD but the ascent was not fast. On surfacing the diver experienced a brief nose bleed of about 2 seconds. The diver was joined by his buddies who surfaced shortly after and all exited the water together with no further symptoms. About 5 min after leaving the water the diver experienced a strange feeling in his teeth and some pain in his nasal passage followed by a tingling in his face. The diver sought assistance, was placed on oxygen and advised to attend a local recompression facility. The diver was given two recompression treatments.

October 2009 10/258

Humber Coastguard received a call from North Tyneside hospital reporting they had a diver who had attended and was now showing signs and symptoms of DCI following a deep dive. Tyneside Volunteer Life Brigade (VLB) attended the hospital to assist with transferring the diver to a helicopter for transfer to Hull hyperbaric chamber. Rescue helicopter R-131 lifted the diver from the hospital and was met at the HLS at Hull by CRT who assisted with taking the diver to the hyperbaric chamber. (Coastguard report).

October 2009 10/260

Shetland Coastguard received a call from a dive boat reporting that they had a diver onboard suffering mild symptoms of DCI. An ambulance was arranged to meet the boat on return to harbour and the diver was taken to the hyperbaric chamber at Stromness for assessment. (Coastguard report).

October 2009 10/262

Clyde Coastguard received a call from a dive boat reporting they had a diver who was unconscious following a rapid ascent. Tobermory AWLB and rescue helicopter R-177 were tasked to proceed to their assistance. The diver was airlifted and met at the HLS by Oban CRT where he was transferred to an ambulance and taken to hospital. However, he was later transferred to Aberdeen Royal Infirmary for hospital and hyperbaric chamber treatment. (Coastguard & RNLI reports).

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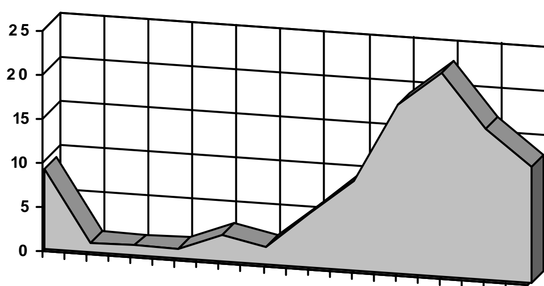
December 2009 10/038

Two divers conducted an uneventful dive to a maximum depth of 28 m for a total duration of 41 min. Towards the end of the dive the first diver prepared to deploy his delayed SMB. His buddy took control of the reel whilst he inflated the delayed SMB using his alternate source. As the line deployed it looped around the first diver's pillar valve and dragged the diver to the surface. The diver regained control and descended again to 18m where he rejoined his buddy. The pair then completed all required decompression stops and carried out a few minutes of additional stops. On surfacing the diver felt fine with no apparent symptoms. As a precaution the diver breathed 100% oxygen via a rebreather during the trip back to shore. The diver felt fine the rest of the day but awoke the next morning with numbness in one arm which did not clear so he contacted a recompression facility. He was advised to attend the chamber and en route experienced numbness start in the other arm. On arrival at the recompression chamber the diver was assessed, confirmed as suffering from DCI and received treatment at the chamber.

Decompression incidents by month



January 2010 10/067

Two groups of divers, a pair and a trio, completed a night dive to a maximum depth of 11m and a duration of 20 and 29 min respectively. One of the divers experienced a buoyant ascent and separation from his buddies at the end of the dive. The following day this diver complained of a tingling in his arm. He contacted a recompression chamber and was advised to attend hospital and have them refer him to the chamber. He received a precautionary recompression treatment.

February 2010 10/264

Stornoway Coastguard received a call from a dive boat reporting they had a diver onboard suffering from a very minor symptom of DCI following an uncontrolled ascent from 25m. The diver had completed multiple dives over five consecutive days. Medical advice from the hyperbaric chamber was that the diver should be transferred for immediate treatment. Rescue helicopter R-100 airlifted the diver to Dunstaffnage hyperbaric chamber for treatment. (Coastguard report).

February 2010 10/266

Belfast Coastguard received a call from a diver reporting he was feeling unwell having missed 6 min of decompression during a dive the previous day. Medical advice from Craigavon hyperbaric chamber was that he should proceed to the chamber as soon as possible. He made his own way where he received successful hyperbaric treatment. (Coastguard report).

February 2010 10/056

A diver completed two days diving within computer limits and with no problems reported. The diver had conducted three dives a day with maximum depths all between 14m and 20m and durations of 23 min to 34 min. On the evening of the first day the diver did not consume any alcohol due to feeling slightly dehydrated. The day after diving, during the afternoon, the diver experienced an ache in her right shoulder and contacted a recompression chamber helpline for advice. Initial advice was to take anti-inflammatories and a good night's sleep. Although a restful night was had the ache was still there the following day and the diver was contacted by the chamber and told to come in. The diver received two recompression treatments over two days and all symptoms were resolved. This was the second DCI incident the diver had suffered and so she was advised to consider a check for a PFO.

March 2010 10/072

A pair of divers conducted an uneventful dive to a maximum depth of 28m for a total duration of 45 min including a 3 min safety stop. Approximately 1 hour after the dive one of the divers felt dizzy and generally unwell. After resting for a further 3 to 4 min the symptoms did not abate and movement of his head increased the dizziness, nausea and difficulties with balance. The diver alerted his buddy who conducted a neurological assessment and administered 100% oxygen. A diver clinic was contacted and evacuation by helicopter to a recompression chamber was arranged. At the chamber examination suggested a mild vestibular DCI and the diver underwent recompression treatment which resulted in a great improvement in the diver's condition.

March 2010 10/073

A group of three divers entered the water for a dive to a planned maximum depth of 20m for a maximum duration of 45 min. The divers encountered low visibility and so the lead diver connected the other pair with a buddy line and maintained close contact with one of the pair. After 26 min a decision was made to abort the dive. The lead diver then became separated from the others and ascended safely. The pair of divers started to ascend but one of the divers had the buddy line wrapped around her neck making it difficult to retain the regulator in her mouth. The other diver untangled the buddy line but during this time the divers were dragged down by the current to a maximum depth of 29m. The pair then regained control and ascended normally to a depth of 11m where they lost control again and ascended to the surface. One diver complained of a headache and the other felt a little unwell but after administering fluids both appeared to recover within a few minutes. The following day the diver who had been tangled in the buddy line was referred to a hyperbaric facility where she received recompression treatment. Both divers fully recovered.

April 2010 10/272

Falmouth Coastguard received a request from the hyperbaric chamber at DDRC in Plymouth requesting helicopter assistance to transfer a diver suffering from symptoms of DCI. The diver had been making his own way to DDRC but suffered vehicle breakdown with his boat on route, while outside the base of the rescue helicopter! Rescue helicopter R-193 was tasked from RNAS Culdrose to airlift the diver to DDRC for treatment. (Coastguard report).

April 2010 10/077

During a training dive to a maximum depth of 8m and after a duration of 9 min, a student had difficulty in clearing his mask and inhaled water up his nose. This caused the diver to cough and spit out his regulator. One of two instructors present replaced the regulator but by this time the student was starting to panic and so a controlled buoyant lift was carried out and the student was towed back to shore. The student complained of a headache but was otherwise talking and responsive. The headache subsided over lunch and the student felt well enough to pack equipment and return home with a slight headache. Later the same day the student complained of a severe headache, neck pain and 'pins and needles' on one cheek of his face. The student was placed on oxygen. Advice was sought from a hyperbaric centre but recompression treatment was not advised. The next day the student was still complaining of a pain in the back of his neck and after further examination and consultation with a recompression facility he was referred for recompression treatment.

April 2010 10/113

An instructor and a student were conducting a training dive in the use of an SMB and achieved a maximum depth of 23m. Approximately 20 min into the dive at a depth of 20m the student started to point to her regulator first stage but the instructor could see nothing wrong. The student's regulator suddenly started to free flow and the student removed her second stage from her mouth because she could not see for the bubbles and started to swim for the surface. The instructor grabbed the student and put his own regulator into her mouth but then struggled to locate his own alternate regulator. During the confusion the pair separated. The instructor thought the student had gone to the surface but could see bubbles from a free flow coming from below. The instructor descended and located the student and noticed that her mask had fallen down her face, she had no regulator in place and her arms were flailing in panic. The instructor grabbed her and pushed her up as hard as he could. On surfacing the student was on her back crying out loud. The instructor swam to her whilst signalling the shore and he noticed a rescue boat making its way to them. The instructor tried to calm the student down and the rescue boat took her onboard and returned her to shore. The emergency services were called and the student was airlifted to a recompression chamber by helicopter and received recompression treatment. The student was discharged the next day.

April 2010 10/279

Clyde Coastguard received a call from the Air Rescue Centre advising they had received a request from the ambulance service for a diver to be airlifted to the hyperbaric chamber at Dunstaffnage. The diver had come ashore the previous day with problems but felt alright. However he had become unwell and reported to his doctor. Oban Sector Manager assisted at the helicopter landing site where the diver was transferred to an ambulance and taken to the hyperbaric chamber. (Coastguard report).

April 2010 10/103

A diver conducted a series of six dives over a weekend all within computer limits and no fast or abnormal ascents and experienced a mild headache after one dive. The day after the last dive the diver experienced 'pins and needles' in fingers and lips, swollen fingers, numbness in right side of mouth, nose and cheek, numbness of lower right leg and foot and a severe headache. The diver was advised to contact a diving medical helpline and they advised attending a recompression facility. The diver received two sessions of recompression treatment and was discharged.

April 2010 10/148

A diver and her buddy completed an uneventful dive to a maximum depth of 15m for a total duration of 44 min including a 3 min safety stop. On recovery into an RHIB the diver started to feel intense pain in her back and was sick. She then developed 'pins and needles' in her feet and spasms in her hands and fingers. She was administered 100% oxygen and contact was made with the Coastguard by mobile phone after no response was received by VHF radio. A diving doctor was consulted and on the doctor's advice a helicopter was tasked to airlift the diver to a recompression facility. The diver received a total of seven recompression treatments for DCI over the next six days before being discharged.

May 2010 10/211

Two divers conducted two dives in a day 16m for 45 min including a 3 min safety stop and 20m for a total 36 min. On the second dive the divers had been collecting scallops. Towards the end of the dive they sent the scallops to the surface using a lifting bag. One of the divers inflated the lifting bag starting with 60 bar of air and experienced a free flow. He stopped the free flow but did not check his contents again. The divers made an ascent up a delayed SMB. At 8m the diver ran out of air. His buddy provided an alternate source and they continued to 6m where both divers lost control of their buoyancy and made a rapid ascent direct to the surface. The divers were recovered into an RHIB. The first diver complained of no sensation in his left hand. He was given fluids and the oxygen set was prepared but found to be faulty even though it had just been serviced. Oxygen was provided but not in the most efficient way. After 10 min the diver reported a return of feeling in his hand. Both divers were given oxygen for 20 min back on shore with no further problems reported. The first diver was subsequently found to have a PFO and scarring from pneumonia.

May 2010 10/287

Solent Coastguard received a call from a dive boat reporting they had a diver onboard who had missed decompression stops following a deep dive when he lost his buoyancy control. He was displaying signs and symptoms of DCI. The boat had other divers in the water who could not immediately be recovered. The boat was placed in a medi-link call with a dive doctor who recommended immediate evacuation to a hyperbaric chamber. The diver was airlifted to the hyperbaric chamber by rescue helicopter R-104 and the fire service assisted at the HLS. The boat recovered its remaining divers and was met on return by Selsey CRT. (Coastguard report).

May 2010 10/289

Shetland Coastguard received a call from a dive boat reporting a diver onboard displaying signs and symptoms of DCI following missed decompression stops when he had a problem underwater. The boat returned to harbour to be met by Stromness CRT who assisted with transferring him to an ambulance to be taken to Stromness hyperbaric chamber for treatment. (Coastguard report).

May 2010 10/295

Dover Coastguard received a 999 call reporting a diver onboard who was showing signs and symptoms of DCI. Medical advice was that he should be evacuated as soon as possible. Rescue helicopter R-104 from Solent airlifted him to the hyperbaric chamber at Whipps Cross Hospital in London. (Coastguard report).

May 2010 10/297

Clyde Coastguard received a 999 call reporting a diver ashore who had symptoms of DCI. Medical advice from the hyperbaric

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chamber was that he should be evacuated to the chamber at Dunstaffnage for treatment. He was transferred by an air ambulance and land ambulance, and Greenock and Oban CRTs assisted at the HLS when the diver was collected and at the hospital. (Coastguard report).

May 2010 10/296

Clyde Coastguard received a call from a doctor at Oban Hospital reporting they had been informed by the police on Skye that they had a man in custody who was reporting symptoms of DCI, after he had been diving over the previous two days. The hospital was given medical advice from a dive doctor at Aberdeen who advised that the diver was seen in hospital for assessment. (Coastguard report).

May 2010 10/298

Milford Haven Coastguard received a 999 call from a diver reporting he was ashore and was suffering symptoms of DCI. Rescue helicopter R-169 airlifted the diver to the hyperbaric chamber at DDRC in Plymouth and Dale CRT assisted at the HLS when the diver was collected. (Coastguard report).

May 2010 10/118

A diver and his buddy had conducted a wreck dive to a maximum depth of 29m and a bottom time of 39 min. During the decompression stop under a delayed SMB the diver's buddy required to use the diver's spare regulator. The buddy then began to ascend because he was a little under-weighted and the diver could not follow him because he had decompression stops to complete. The buddy had the delayed SMB and the diver had forgotten his own delayed SMB. The diver completed his decompression requirements in mid-water and without a marker. Total dive time was 79 min. This diver was reported as being overdue to the Coastguard who tasked a SAR helicopter but when the diver surfaced safely the helicopter was stood down. Shortly afterwards the buddy complained of feeling ill and was airlifted to a chamber for recompression treatment. (Coastguard report).

May 2010 10/117

A diver completed two dives on two different wrecks. He later began displaying symptoms of DCI. The Coastguard was contacted and arranged for a helicopter landing site. The diver was transferred to the landing site by paramedics and the diver was airlifted to a recompression facility for treatment. (Media report).

June 2010 10/303

Stornoway Coastguard was alerted to a diver suffering from suspected DCI following a dive to 35m. Coastguard rescue helicopter R-100 was tasked to fly the casualty to Dunstaffnage chamber for treatment. (Coastguard report).

June 2010 10/145

Two divers completed a first dive without incident to 37m for a total duration of 33 min including 7 min of decompression stops. They then conducted a second dive 4 hours later on a wreck to a maximum depth of 39m. Towards the end of the dive one diver experienced a free flow on his primary regulator. He was diving with a manifolded twin-set with the manifold open. The diver tried to retain the free flowing regulator whist shutting down the manifold but was unable to, so he removed his rig and placed it on the wreck and shut it down, manifold first. The free flow stopped and the diver had 20 bar left in the affected cylinder. The diver carried his rig over to his buddy and the buddy deployed a delayed SMB. During the ascent the diver conducted a slow ascent but faster than his buddy until he reached 10m at which point he became hooked up on the buddy's delayed SMB line. The diver cleared the line but was unable to control his ascent and he surfaced without completing decompression stops and summoned assistance from the boat. He was recovered into the boat and placed on 100% oxygen. The tension on the line caused his buddy to release his reel and then deploy his spare delayed SMB. The buddy then conducted a normal ascent completing 10 min of required decompression stops. The Coastguard was contacted and a helicopter was tasked to airlift the diver who had missed stops and transfer him to a recompression facility where he was treated for DCI.

June 2010 10/307

Diver had been taken to Glasgow hospital where the staff requested the diver be transferred to Dunstaffnage chamber. (Coastguard report).

June 2010 10/121

A diver completed a first dive to a wreck at 45m for a dive time of 53 min including 7 min of decompression stops with no adverse effects. After a surface interval of 3 hours a second dive was conducted to 24m for 37 min including a 4 min decompression stop again with no immediate adverse effects. Approximately 8 hours and 30 min after the second dive the diver awoke with 'pins and needles' and numbness in his right hand and aching in the forearm. Fluids were taken and advice sought by phone from a local recompression chamber. The diver was advised to attend the chamber for examination. He received recompression treatment and was discharged with residual symptoms that were expected to resolve with time.

June 2010 10/125

MRCC Forth were contacted by a dive support vessel reporting they had a diver with suspected DCI heading for St. Abbs harbour. The diver came up from a 16m stop from a 30m dive, the vessel had a doctor onboard, Forth Coastguard arranged for an ambulance to meet the vessel with inshore lifeboat from St. Abbs and Coastguard rescue team from Eyemouth, rescue helicopter R-131 airlifted the casualty to Aberdeen Hospital. (Coastguard report).

June 2010 10/127

A diver had completed a wreck dive to a maximum depth of 45m using nitrox 25. All stops required by a dive computer were completed including deep stops. The diver boarded the charter boat using a stern lift, de-kitted and experienced no ill effects. The boat returned to harbour and whilst unloading equipment the diver experienced vertigo and nausea. A local dive centre was alerted and contact was made with the Coastguard and 100% oxygen provided. The Coastguard tasked a rescue helicopter and the diver was taken onboard another charter vessel to facilitate transfer from the deck. The diver was taken by helicopter to a recompression facility where he received recompression treatment for DCI.

June 2010 10/130

A diver and his buddy conducted a first dive of the day to a maximum depth of 27m and a total duration of 43 min. Surface conditions were of a long swell and, whilst waiting for the last pair of divers to surface, many of the dive group felt queasy and some decided not to do a second dive. During a surface interval the subject diver went back to bed and slept. After a surface interval of 2 hour and 48 min the diver was woken and asked if he was diving and he said 'Yes'. The diver and his buddy conducted a second dive to a maximum depth of 24m for 43 min. The pair were the first to surface and regain the boat. Again several divers felt queasy in the swell and the diver along with two others went and sat quietly on a bench behind the

cabin. On returning to harbour equipment was prepared for storage or offloading. The diver climbed the harbour wall ladder a short distance onto the harbour and then collapsed and vomited. The diver laid still and was able to communicate but was unwilling to move. The diver complained of stomach cramps, nausea and feeling dizzy. A local doctor, who was passing, was called and took charge. An ambulance was called and 100% oxygen administered as a precaution. Advice was sought from a hyperbaric facility. The diver was taken by ambulance to hospital during which his condition worsened. On arrival at hospital the diver had developed a skin rash. He was given intravenous fluids and transported by ambulance to a recompression chamber where he received recompression treatment for an inner ear DCI. The diver was discharged the following day.

June 2010 10/315

Solent Coastguard was contacted by a dive support vessel informing them they had a diver onboard suffering from suspected DCI, following a medical connect call the casualty was airlifted by Coastguard rescue helicopter R-104 and transferred to Chichester hospital, the HLS was prepared by Selsey Coastguard. (Coastguard report).

June 2010 10/171

A diver and her buddy conducted two dives during a day, 9m for 35 min and 10m for 42 min. Approximately 90 min after surfacing from the second dive the diver experienced severe dizziness, nausea and pain in her left ear. She subsequently noticed a dull ache in her left shoulder and numbness in both hands. The diver received oxygen which eased the shoulder ache. The diver was referred to a recompression chamber and received recompression treatment to rule out DCI which resulted in a rapid improvement in symptoms. The diver had received previous recompression treatment prior to being diagnosed with a large PFO. She had a PFO closure and subsequent checks on the closure and lungs have indicated there is no underlying problem. It has been suggested that the diver may have suffered from salt water aspiration syndrome and not DCI.

June 2010 10/233

At the end of a wreck dive to a maximum depth of 23m a diver deployed his delayed SMB. In doing so he over-inflated the delayed SMB, his octopus began to free flow and his reel snatched and jammed. The diver was dragged up approximately 4m whilst releasing the reel and then, whilst trying to stop the free flow, it tangled again and he was dragged up further. The diver abandoned the reel and stopped the free flow but was unable to dump sufficient air from his drysuit and therefore surfaced. On leaving the seabed the diver had 1 min of required decompression stops at 3m but on the surface his computer showed 'SOS' and 9 min of stops required at 3m. The diver self-administered oxygen for 30 min and refrained from diving for the rest of the day. No symptoms appeared. The following day the diver felt unusually tired and consulted a DCI helpline. He attended a chamber for assessment and although no obvious signs or symptoms were found he received a precautionary treatment and was advised to refrain from diving for six weeks.

June 2010 10/320

Diver admitted to Glasgow Hospital, the duty doctor contacted Clyde Coastguard as he though he may need the Dunstaffnage chamber to treat a diver who had problems with one leg following a dive. (Coastguard report).

June 2010 10/322

Stornoway Coastguard received a call from a dive support vessel reporting that they had a diver aboard suffering from nausea and a rash following a dive to 22m, medical advice was sought and the doctor recommended the casualty and buddy be airlifted to a recompression chamber for treatment. Rescue helicopter R-100 was tasked with Broadford Coastguard assisting with the HLS and refuelling. The casualty was taken to Dunstaffnage chamber for treatment. (Coastguard report).

June 2010 10/136

A diver and his buddy completed a wreck dive to a maximum depth of 22m and a total duration of 38 min. The dive had involved a slow descent due to one diver having difficulty in clearing ears and it took almost 9 min to reach the maximum depth. A current required the divers to hold onto the shotline throughout the descent. A normal ascent up a shotline with a 3 min safety stop at 5m was conducted without incident. On surfacing the more experienced diver took over coxswain duties to allow others to dive. After 10 to 15 min on the surface the diver noticed a pain in his left shoulder as if he had been punched. There were no other symptoms but movement made the pain worse. The diver was moved to another boat and given 100% oxygen and isotonic drinks. A neurological examination revealed no problems and checks revealed no rash. Once all divers had been recovered the boats returned to shore and a local recompression facility was contacted who advised attendance for further assessment. DCI was diagnosed and the diver received recompression treatment that left some residual pain in the left shoulder. After two further treatments there was no further improvement and the diver was advised to continue with anti-inflammatory medication and avoid diving until after a review 4 weeks later. The diver had used nitrox 27 for the dive.

June 2010 10/177

A diver was on the first dive of the day having completed two dives the previous day without any problems. During the descent to a wreck at a depth of 34m the diver experienced no problems. At 34m the diver experienced a sudden shortness of breath. The diver switched to his second regulator on an independent cylinder but still felt unable to breathe and became anxious. The diver rested on the seabed and swapped regulators, in doing so he raised a cloud of silt and lost sight of his buddy. The diver decided to ascend and did not complete any decompression stops. Total dive time was 7 min. On surfacing the difficulty breathing continued and the diver was recovered to the charter boat and placed on oxygen for 30 min. His breathing recovered to near normal levels very quickly. As the diver was not experiencing any symptoms of DCI he chose not to return to shore at that time. His equipment was checked and no defects were found. On returning to shore a local doctor was consulted about his shortness of breath. The doctor suspected pneumonia and found evidence of a skin DCI. The diver was again placed on oxygen and sent to hospital. The diver subsequently received recompression treatment.

June 2010 10/324

Holyhead Coastguard was contacted by a dive support vessel reporting they had a diver aboard who had made a rapid ascent from 40m and was suffering from suspected DCI, the diver had made a dive to the same depth 90 min earlier. Holyhead Coastguard tasked RAF rescue helicopter R-122 to airlift the casualty to Murrayfield Hospital. Vessels from the Liverpool Bay oil and gas field offered assistance; the vessel VOS Inspirer launched an RHIB to stand by the dive boat. The helicopter was met at the HLS by Holyoak CRT. The casualty was the skipper of the vessel; the remaining persons (dive charter) were not confident to handle the vessel and were escorted into port by another vessel. (Coastguard report).

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June 2010 10/246

A diver suffered back pain, tingling fingers with pain and could not support his own weight. The pain came on after carrying heavy equipment after a dive to 30m for 29 min. Oxygen was given and he was advised to go to chamber to rule out DCI.

June 2010 10/138

A diver suffered symptoms of DCI after a rapid ascent from a 40m dive 15 miles offshore. The diver was the boat's skipper and no one else onboard had experience of steering the boat. A rescue helicopter airlifted the diver to a recompression chamber where he was treated. (Media report).

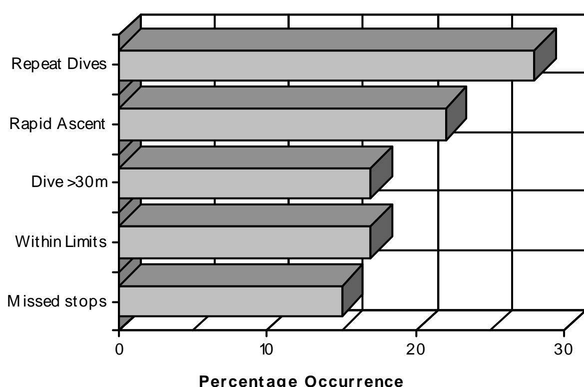
June 2010 10/139

A diver had conducted a dive to 20m for 40 min 20 hours previously and carried out a dive to 33m for 22 min using nitrox 32. At the end of the dive the diver deployed a delayed SMB from a depth of 27m. During deployment the line became tangled around the diver's hand and pulled the diver to the surface. Once back in the boat the diver felt pain in the right shoulder and chest. The diver was placed on 100% oxygen and the Coastguard was called. The Coastguard tasked a helicopter to airlift the diver to a recompression chamber. (Coastguard report).

June 2010 10/172

A diver and his buddy conducted a series of dives as part of a club trip. Day 1 27m 42 min nitrox 31, 18m 58 min nitrox 25; Day 2 33m 37 min nitrox 31, 36m 27 min nitrox 25; Day 3 43m 39 min on nitrox 23. Immediately after surfacing from the last dive the diver felt pain in his right shoulder. After 15 min the pain did not improve and spread to the right side of his neck. The diver went onto oxygen whilst returning to shore where an ambulance took him to the recompression chamber. The diver received recompression treatment which left some pain and a general ache around his shoulder. The diver was discharged and advised not to dive for four weeks and advised to take painkillers until the ache settled down.

Percentage analysis of factors involved in cases of DCI



July 2010 10/152

A diver was given 100% oxygen and airlifted for recompression treatment following a shore dive. (Media report).

July 2010 10/153

Following a 25 min dive to a maximum depth of 53m using trimix a diver reported a 'twinge' in her left arm and wrist at the site of a previous DCI four years previously. The diver was airlifted to a recompression chamber for treatment. (Coastguard report).

July 2010 10/328

Portland Coastguard tasked Portland Coastguard helicopter R-106 to airlift a diver suffering from suspected DCI from a dive support vessel, the helicopter was met at the HLS by Poole Coastguard team who assisted with the transfer to the ambulance, and the casualty was taken to Poole recompression chamber. (Coastguard report).

July 2010 10/155

A diver using a rebreather made a rapid ascent from a 40m dive. The diver was airlifted to a recompression chamber for observation and possible treatment for DCI. (Coastguard & media report).

July 2010 10/156

Towards the end of a dive to a wreck at 30m a diver felt he was becoming light. He picked up rocks to compensate and aborted the dive. At 20m he could not control buoyancy without finning down. He held onto his buddy for support but at 6m the pair separated and the diver ascended rapidly to the surface without completing 10 min of required decompression stops. The diver was recovered into the boat and given oxygen and fluids and the Coastguard was contacted due to reported pains in the diver's calf muscles. The Coastguard tasked a rescue helicopter and the diver was airlifted to a recompression chamber for treatment.

July 2010 10/161

A diver complained of elbow joint pain following a dive to 46m for a bottom time of 30 min and a total duration of 60 min. The diver was placed on oxygen, the Coastguard was contacted and the diver was airlifted for recompression treatment. The diver had been treated for DCI six years previously. (Coastguard & media reports).

July 2010 10/194

A diver conducted six dives over three days with maximum depths between 25 and 35m and decompression stops of up to 2 min plus safety stops. All dives were uneventful and conducted within computer limits. Approximately 90 min after the final dive DCI symptoms started to appear. Initially the diver experienced an aura in her left eye including some loss of vision. Initially this was put down to a migraine which the diver had a history of. Discomfort in her right shoulder was put down to a pulled muscle whilst carrying equipment and was also ignored. About an hour later, whilst having a shower, the aura had reduced but an itching was felt and inspection identified three itchy rashes. The diver became concerned about DCI and placed herself on oxygen and within half an hour the aura and one of the rashes had disappeared. A call was made for advice to a recompression chamber and they advised contacting a local chamber. It was out of office hours and so the local chamber was only dealing with emergencies. The diver did not feel it was an emergency situation. After a break the diver again breathed oxygen for 30 min after which the remaining rashes had almost disappeared. The next day the diver contacted the local chamber who confirmed a DCI and advised a check for a PFO. A subsequent test confirmed the presence of a large PFO.

July 2010 10/164

Prior to a dive a diver felt sick due to the rough surface conditions. Once on site he wanted to get in the water as quickly as possible in the hope he would feel better in the water. Underwater the feeling of sickness eased slightly but the diver was not enjoying the dive. Despite his discomfort he continued with the dive because it counted towards his speciality training. At the end of the bottom time the diver deployed a delayed SMB with some difficulties which he resolved. During the ascent, at a depth of 5m, his computer was indicating 6 min of decompression stops. The diver was diving with nitrox 32 and should not have required stops. Due to feeling unwell he surfaced and missed decompression stops. Once back on the boat the diver collapsed and could not feel his fingers and toes. He was placed on oxygen and airlifted for recompression treatment. (Coastguard report).

July 2010 10/337

Stornoway Coastguard received a call on VHF from a dive support vessel reporting having a diver aboard suffering from suspected DCI, the vessel was connected with Aberdeen Royal infirmary and medical advice given, Stornoway Coastguard tasked Coastguard rescue helicopter R-100 to recover the diver and buddy who were taken to Dunstaffnage chamber for treatment. The helicopter was met by Loch Boisdale CRT who prepared the HLS. (Coastguard report).

July 2010 10/339

Portland Coastguard tasked Coastguard helicopter R-106 to airlift a male diver from a dive vessel, over the wreck of the Salsette, 10 miles west of Portland Bill, after he started showing signs of DCI. He was met at Poole by a specialist dive doctor, South Western Ambulance and Poole Coastguard Rescue Team, and then taken onwards to the recompression chamber. (Coastguard report).

July 2010 10/346

Stornoway Coastguard tasked coastguard helicopter Rescue 100 to Tiree to transfer a diver with DCI from Tiree hospital to Dunstaffnage hyperbaric chamber. (Coastguard report).

July 2010 10/345

Stornoway Coastguard tasked coastguard helicopter Rescue 100 to take a diver with the DCI from Benbecula hospital to Dunstaffnage hyperbaric chamber. (Coastguard report).

July 2010 10/180

A pair of divers were ascending after an uneventful wreck dive to a maximum depth of 36m. At the first of three decompression stops at 9m one of the divers kept turning away from his buddy where he would normally have made eye contact. Afterwards it was explained that his delayed SMB line kept pulling him round. After surfacing the diver was very quiet and said he felt dizzy. His buddy instructed him to inflate his BCD more and go to the boat first. As the boat approached, the diver drifted past the tail lift and when doing so shook his head and went face down. His buddy swam after him and turned him over and pulled him to the tail lift. At this point the diver's body had gone completely stiff which created great difficulty in recovering the diver onto the lift. The skipper of the boat and the buddy managed to get the diver onto the lift and recovered into the boat. The buddy was then recovered into the boat and given the oxygen kit by the skipper who then alerted the Coastguard. The skipper had to recover other divers who were surfacing. The buddy started to administer oxygen to the troubled diver but it became apparent that resuscitation was required and the buddy started to administer CPR. CPR was successful and the diver was airlifted to a recompression chamber where he was recompressed and, within 3 hours, was able to stand and reported feeling normal. The diver was kept in hospital overnight and received eight further treatments with a further three expected. The diver was advised to refrain from diving until the cause of the incident could be found and addressed.

July 2010 10/349

Shetland Coastguard evacuated a diver suffering from suspected DCI from Scrabster, the casualty boarded a ferry to travel to the mainland to seek treatment, a medical link call was established and Thurso lifeboat was tasked but stood down. Paramedics met the casualty on the ferry, the casualty was later seen at Stromness chamber. (Coastguard & RNLI reports).

July 2010 10/350

Clyde Coastguard was alerted to a diver who had completed a dive to 30m for 27 min, he had missed 1 min of stops and surfaced with a headache, the diver was given 100% oxygen and a medical link call was established with Aberdeen Royal Infirmary, the diver was taken by ambulance to Millport chamber for treatment, Cumbrae Coastguard CRT assisted with the transfer. (Coastguard report).

July 2010 10/181

Three divers conducted a dive on a wreck to a maximum depth of 30m. One diver had deployed a delayed SMB and during the ascent at a depth of 8m another of the three became disoriented and sank back down to 12m. The third diver descended and checked she was alright. The diver then put air into her wing but was then unable to dump it. As she approached the first diver at 9m she held on to him and dragged him to the surface. Both divers regained control and descended back down to 10m. During the descent the second diver started to drop rapidly and experienced pain in her ears and felt as if she was spinning out of control. She regained control and both divers completed 22 min of decompression stops. Once out of the water and back onboard the boat both divers were given oxygen for the rapid ascent whilst the boat returned to shore. As they neared the shore it was discovered that the second diver's computer had locked out. The divers were taken to a recompression chamber by car and both were given recompression treatment.

July 2010 10/213

A diver and her buddy conducted two dives in a day. This was the diver's first dives for a few months. Dive 1 24m for 32 min including a 3 min safety stop at 6m, Dive 2 15m for 32 min including a 3 min safety stop at 3m. Due to strong currents both dives had involved quite a lot of finning. Following the second dive, the divers walked up a fairly steep hill, the diver felt very short of breath and had to stop half way up but breathing returned to normal after reaching the top. The diver went to bed at 10pm but awoke at 4am very short of breath and with pains in her chest and back. The diver assumed she had pulled a muscle. The next morning a recompression chamber was contacted and they advised going to hospital for an x-ray which she did but it showed clear. During examination the diver noticed her legs felt leaden, generally felt poorly and also noted a tingling in one arm. This progressed to having no feeling in her left arm and the diver was administered oxygen by hospital staff. The diver was transferred to a recompression chamber where she received recompression treatment after which she was allowed home. However symptoms reoccurred and the diver received two further recompression treatments and was undergoing further medical treatment six weeks after the incident.

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July 2010 10/182

A pair of divers had completed one dive the previous day. One of the divers had borrowed a drysuit from another diver. Following a dive to a wreck at a maximum depth of 30m for 40 min the divers paused for 30 sec at 8m. Their computers indicated 9 min of stops required at 3m. The first diver was unable to stop at 3m and continued direct to the surface due to difficulties dumping air from the unfamiliar drysuit. Back onboard the boat the first diver began displaying symptoms of DCI and both divers were airlifted to shore and taken by ambulance to a recompression chamber where the first diver received recompression treatment.

July 2010 10/185

A diver had completed a dive to a maximum depth of 24m for a total duration of 44 min including a 3 min safety stop at 6m. 20 min after surfacing the diver complained of an ache in his right arm. The Coastguard was contacted and the diver was airlifted to a recompression chamber for treatment. (Coastguard report).

July 2010 10/186

Two divers from the same group made rapid uncontrolled ascents following a second dive of the day on a wreck at 33m. The first diver had deployed his delayed SMB and started his ascent when he got caught in the bubbles of another diver, became disorientated and went direct to the surface missing decompression stops. The second diver had been diving as part of a group of four but became separated from them on the wreck due to it being dark and visibility of around 3-4m. The diver did a circuit of the bow and conning tower and then deployed his delayed SMB and began a slow normal ascent to around 20m when the ascent became more rapid and the diver ascended to the surface without stops and his computer locked out. Both divers were recovered and placed on oxygen by the charter boat skipper although neither exhibited symptoms. The Coastguard was contacted and both divers were airlifted to a recompression chamber for assessment. Both divers were reported to have been suffering from spinal DCI. (Coastguard report).

July 2010 10/353

Aberdeen Coastguard requested medical advice for a diver with suspected DCI off Lossiemouth. Ambulance arranged to meet vessel on arrival at Lossiemouth Harbour. Lossiemouth CRT in attendance. (Coastguard report).

August 2010 10/187

A diver was conducting a solo drift dive at a depth of 30m. Whilst stabbing a fish his weightbelt fell off. To try and avoid a rapid ascent the diver held the belt in his hand. It is not known what happened after that during the ascent other than the diver reporting that things 'snowballed into disaster'. After surfacing the diver complained of being dizzy and had a pain in his arm. The Coastguard was contacted and a rescue helicopter was tasked to airlift the diver to a recompression chamber for treatment. (Coastguard report).

August 2010 10/363

Shetland Coastguard tasked an ambulance and Coastguard team to meet a vessel with a diver onboard suffering from suspected DCI following a 44m dive. The casualty was transferred to a recompression chamber and was administered oxygen whilst in transit. (Coastguard report).

August 2010 10/364

Falmouth Coastguard received a call on VHF channel 16 from a dive support vessel reporting they had a diver aboard suffering from a severe headache after a dive to 26m for 57 min, the diver did not initially report the symptoms to the dive boat skipper. A medi link call was established and the doctor recommended the casualty and buddy diver be airlifted to DDRC for treatment, RN rescue helicopter R-193 was tasked and flew the pair to Robrough airport Plymouth for onward transportation to the DDRC. The dive vessel was met in harbour by Penzance CRT. (Coastguard report).

August 2010 10/198

A diver carried out two dives 23m for 45 min and 25m for 35 min with a surface interval between them of just over 2 hours and with a 3 min safety stop at 3m on each. 30 min after surfacing from the second dive the diver experienced 'pins and needles' in his legs. He was administered oxygen and went below deck to lie down. After 20 min the symptoms improved slightly but a call was made to the Coastguard who tasked an inshore lifeboat to make an assessment. A helicopter was put on standby and an ambulance was waiting ashore. The diver and his buddy were taken by ambulance to a recompression chamber. The diver was assessed and received recompression treatment with a second treatment the next day with a resolution of symptoms. The diver was advised to refrain from diving for six weeks.

August 2010 10/366

Yarmouth Coastguard was informed by Sea Palling lifeguards, as they assisted ambulance crew and paramedic with a diver possibly suffering from DCI off Sea Palling. The man was taken to James Paget hospital for treatment. (Coastguard report).

August 2010 10/189

Stornoway Coastguard was alerted by a dive support vessel of a diver who had surfaced from a dive to 22m and was now disorientated and vomiting. A medical connect call was established with the Aberdeen Royal Infirmary duty diving doctor. The advice was to airlift the casualty to Dunstaffnage chamber for treatment. The vessel steamed toward port and was met by Mallaig CRT. RAF rescue helicopter R-177 airlifted the diver and transported the diver to the chamber. (Coastguard report).

August 2010 10/367

Solent Coastguard received a call from a dive support vessel reporting that they had a diver aboard who was feeling unwell following a rapid ascent from 32m following a dive for 20 min, a medi link call was established with a duty diving doctor, the recommendation was to airlift the casualty to Chichester recompression chamber for treatment, Coastguard rescue helicopter R-104 flew the casualty to St Richards hospital, the HLS was prepared by Selsey CRT. (Coastguard report).

August 2010 10/201

A diver had conducted two dives the previous day without incident. The diver and her buddy had an uneventful dive on the second day on a wreck to a maximum depth of 30m. The pair began a normal ascent but at 20m the diver started to lose buoyancy control. It later was discovered that the diver had lost a 4kg weight from a weight pouch in her BCD. Her buddy tried to assist in slowing the ascent by making himself heavy and holding on to her. The diver was swimming down to try and compensate but became tangled in the delayed SMB line. At 7m her buddy freed the diver from the line. The diver then let go of her buddy and made a feet first rapid ascent to the surface. Her buddy completed 4 min of decompression stops and then surfaced to see the diver being recovered into the boat. The diver informed the crew that she had experienced a fast ascent and missed decompression stops. She de-kitted, oxygen was

administered and the Coastguard informed. Within 5 min the diver was complaining of cold, numbness and tingling and a helicopter recovery was arranged. The helicopter airlifted the diver and another diver in the group who had experienced a separate abnormal ascent (Incident 10/202) to a recompression facility for treatment. The diver received a 4 hour treatment and was released the same day and advised not to dive for four weeks.

August 2010 10/372

Brixham Coastguard requested Coastguard helicopter 106 via ARCC Kinloss to assist a diver with suspected DCI at Bigbury Bay. Coastguard helicopter airlifted the diver to DDRC. (Coastguard report).

August 2010 10/375

Shetland Coastguard was called by a dive vessel on VHF CH16 and requested working channel, stated that they had a 44 year old female showing signs of DCI, Balfour hospital called and asked to arrange ambulance to meet dive vessel at Stromness. En-route to Stromness the casualty's condition worsened, diving vessel proceeded to different location for ease of access. Dive vessel transferred casualty with assistance from Stromness Coastguard team to a waiting ambulance for onward transportation to hyperbaric unit. (Coastguard report).

August 2010 10/205

A group of five divers were conducting the third dive of a deep dive speciality course; this dive was to a maximum depth of 37m. Towards the end of the dive the instructor deployed a delayed SMB and all divers started to ascend. At 21m the reel line snapped. A second instructor in the group took one of the students and they performed a normal ascent. The first instructor deployed his reserve delayed SMB but in doing so sank again to a depth of 36m before he could deploy it fully. On checking air he found that one of the students was down to 50 bar, whilst the other had 100 bar. The instructor gave the first student his regulator on a long hose and switched to his backup. The first diver was reluctant to take the air source and started to panic. An ascent was started but as the divers ascended at slightly different rates the alternate air source regulator started to pull from the first student's mouth and he didn't dump air from his BCD fast enough. Buoyancy control was lost and all three divers ascended direct to the surface missing decompression stops. Their total dive time was 27 min. On recovery into the boat one diver complained of chest pains and feeling dizzy. The Coastguard was called and the three divers were airlifted to a recompression chamber for treatment. (Coastguard report).

August 2010 10/206

A diver conducted a dive on the second day of a diving trip to a maximum depth of 37m and a total duration of 60 min using nitrox 25 as his dive gas. The diver completed decompression stops of 19m 3 min, 11m 2 min & 6m 11 min as required by his computer which was set to include deep stops. All stops were conducted using a nitrox 50 decompression mix. On surfacing the diver felt a slight pain in the right shoulder which became more noticeable whilst waiting to be picked up. On recovery into the dive boat via a diver lift the diver noted a lack of strength in the shoulder but no additional pain. He alerted the crew and was de-kitted, laid down in the cabin and given 100% oxygen and fluids. The Coastguard was called and it was confirmed that the diver would be met by an ambulance at the harbour. The diver was transferred by ambulance to a recompression chamber where a doctor confirmed DCI and the diver received recompression treatment with a complete resolution of symptoms. The diver was advised not to dive for four weeks.

August 2010 10/207

Brixham Coastguard tasked Plymouth Coastguard rescue team to assist the ambulance service with a male diver who had suffered a rapid ascent whilst diving from a dive vessel on the wreck of the Scylla, in Whitsand Bay. The male was taken to Derriford Hospital for treatment. (Coastguard report).

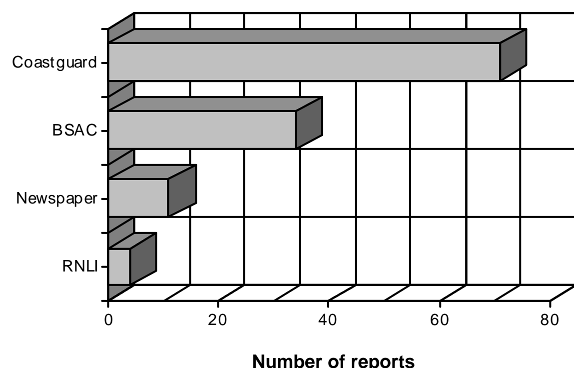
August 2010 10/384

Solent Coastguard coordinated the transportation of a diver by rescue helicopter R-125, the diver was believed to be suffering from suspected DCI. The HLS site at Chichester was prepared by Selsey Bill Coastguard team. (Coastguard report).

August 2010 10/216

On a weekend charter a diver conducted two dives on the first day; 27m for 39 min and 30m for 37 min, both including a 3 min safety stop at 6m. On the second day he conducted a dive to 25m for 42 min, again including a 3 min safety stop. The dive was without incident and within normal descent and ascent rates. After returning to the shore and unloading equipment the diver felt generally unwell and had pain, numbness and tingling down his left leg. The leg symptoms were attributed to a historic spinal problem. The pain eased during the surface interval but the diver declined a second dive from a boat but felt well enough to do a shallow shore dive to a maximum of 12m for a duration of 59 min with an average depth of 5m. The diver continued his holiday and walked approximately 8 miles along a coastal path the next day. Travelling home the following day the diver experienced numbness in both legs. He consulted a diving doctor when the numbness persisted the following day and was advised to attend a chamber for a medical examination. He was diagnosed with DCI and received recompression treatment with complete resolution of symptoms.

Decompression data source analysis



September 2010 10/385

Dive support vessel contacted Liverpool Coastguard reporting two divers aboard suffering from suspected DCI, Liverpool Coastguard requested an ambulance to meet the vessel and transport the divers to Murryfield hospital for treatment. (Coastguard report).

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September 2010 10/218

A diver and her buddy conducted a dive to 27m. The diver checked her gas contents at one point in the dive and had 100 bar remaining. The divers continued the dive for a further 5 min by which time the contents had fallen to 50 bar. The divers started to ascend with the diver using her gas quite quickly. At 6m the diver ran out of gas and went slowly to the surface missing 5 min of decompression stops. Her buddy remained at 6m to complete his stops. Once surfaced the diver alerted the dive boat. She was recovered from the water and placed on oxygen. The diver was returned to the shore and driven to a recompression chamber where she received recompression treatment for pain in the joints and a headache. The equipment was tested the following day and no faults were found but on refilling the cylinder the valve was found to have worked loose and was leaking.

September 2010 10/389

Shetland Coastguard was contacted by a dive vessel reporting they had a diver aboard suffering from suspected DCI following a dive to 36m, Stromness Coastguard team met the vessel when they returned to port, the casualty was taken to Balfor Hospital by ambulance for treatment. (Coastguard report).

September 2010 10/390

Shetland Coastguard tasked Longhope lifeboat, to recover a female diver who had made a rapid ascent from 6m, the casualty was suffering joint pains in left arm, the dive support vessel was steaming towards Stromness. The casualty was recovered by ambulance and taken to Stromness chamber for treatment. (Coastguard & RNLI reports).

September 2010 10/391

Shetland Coastguard was contacted by a dive support vessel reporting having a diver aboard suffering from suspected DCI following a dive to 36m. The diver was experiencing pain in his right arm and was being administered oxygen. The vessel returned to Stromness and transferred the casualty to Stromness surgery. (Coastguard report).

September 2010 10/394

Brixham Coastguard was informed of a diver who had surfaced with nausea and a headache, a medical link call was established. The doctor recommended that the diver be taken to the DDRC for treatment. The dive vessel was met by a land ambulance for transportation to the DDRC in Plymouth. (Coastguard report).

September 2010 10/223

A diver conducted his deepest dive ever whilst using a second hand wing that he had not used before. The diver and an instructor conducted a dive to a maximum depth of 30m. As the pair reached 18m the diver tried to dump air from the wing by pulling on the hose but this type of wing did not have that facility. It did not occur to the diver to try other means of dumping gas. The diver made an uncontrolled ascent from 18m to the surface with a total dive time of 30 min. The diver was recovered to a boat and monitored for symptoms but none appeared. It was decided not to put him on oxygen at that time. The following morning the diver indicated he had a rash on his back. The diver was referred to a recompression chamber and received treatment for DCI which resolved all symptoms.

September 2010 10/400

Shetland Coastguard tasked Stromness CRT and an ambulance to recover a diver from a dive support vessel who had reported having a diver aboard who was suffering shoulder pain following 30 min dive to 30m, the diver was transferred to Stromness chamber for treatment. (Coastguard report).

September 2010 10/401

Shetland Coastguard tasked Stromness CRT and an ambulance to recover a diver from a dive support vessel who had reported having a diver aboard who was suffering leg pain and numbness following a 20 min dive to 27m, the diver was transferred to Stromness chamber for treatment. (Coastguard report).

September 2010 10/402

Dive boat called Stornoway Coastguard on VHF CH16 requesting medical advice for a 63 year old female diver with decompression symptoms. Vessel was connected to dive doctor at Aberdeen Royal Infirmary who advised she be transferred to Dunstaffnage Chamber. R-100 was scrambled and uplifted the casualty from the shoreline at Doune, Sound of Sleat and transferred her to Dunstaffnage. (Coastguard report).

September 2010 10/403

Clyde Coastguard was contacted by a dive support vessel requesting medical advice for a diver, the vessel was put in touch with the recompression chamber, the diver was subsequently seen by a doctor, who advised the casualty be taken to Oban Hospital for treatment. (Coastguard report).

September 2010 10/405

Clyde Coastguard was contacted by a party of divers reporting that one diver had possible DCI following a dive, the casualty was on oxygen, Clyde Coastguard paged the duty staff at Dunstaffnage recompression chamber and the casualty was airlifted by rescue helicopter R-177, the diver was transferred to hospital and kept under observation. (Coastguard report).

Injury / Illness

October 2009 10/011

A diver conducted a dive to a maximum depth of 20m for a duration of 40 min. After the dive he reported having experienced symptoms similar to narcosis towards the end of the dive. He indicated that he had started taking steroids a few days earlier and suggested that this might have contributed to the symptoms experienced. After a surface interval of 2 hours 9 min a second dive was undertaken to a maximum depth of 22m. During this dive the diver indicated that he was 'not OK' and his buddy offered a nitrox 40 mix for him to breathe to see if this would alleviate the narcosis-like symptoms. The diver took four or five breaths of the nitrox mix and then switched back to his own breathing supply (air). The diver then became unresponsive and his buddy began raising him to the surface using a controlled buoyant lift. The unresponsive diver was breathing from his own regulator until the pair reached a depth of 6m at which point he began to show signs of coming round but started to lose the grip on his mouthpiece. The buddy decided to make a faster ascent to the surface. On the surface the troubled diver was responsive and asking questions but was unaware of what had happened. The buddy towed the diver to shore allowing him to breathe his nitrox 40. After recovery 100% oxygen and water were provided. The diver stated he had taken two steroids 20 min prior to the dive. Medical advice was sought and the diver advised not to take steroids 48 hours prior to diving.

October 2009 10/017

A dive RHIB called the Coastguard on VHF radio reporting a diver who had surfaced from a wreck dive and was bleeding from the ear. The diver was airlifted to shore and taken by ambulance to a hyperbaric chamber for assessment. The diver had made a rapid descent from 15m to 27m and had burst his eardrum. No recompression was required and the diver was released home. (Coastguard report).

October 2009 10/046

A diver entered the water and after a short surface swim began to feel unwell and aborted the dive. On leaving the water the diver was breathless and overexerted and so a 999 call was made. The diver was given the all clear by a paramedic.

October 2009 10/020

A diver and his buddy on a dive to a maximum depth of 41m spotted a large anglerfish 20 min into the dive. The pair wrestled with the fish and after 5 min sent it to the surface. The diver then inhaled and got only a quarter of a breath and no more. The depth at this point was 36m, dive time 25 min and his computer showed 14 min of decompression required. The diver was using manifolded twin 7 litre cylinders. He tried to check and open the manifold but it would not move and so he assumed it was open and he was out of gas. He did not alert his buddy who was diving with a rebreather. The diver made a free ascent to the surface taking approximately one minute to ascend. On surfacing he was recovered to the boat and placed on oxygen. He refused the offer to be met by an ambulance on regaining the shore as he showed no immediate symptoms of DCI. During the night the diver awoke with wheezing, tight chest and difficulty breathing. He waited until morning and then contacted a hyperbaric centre who advised attending A & E. At hospital he was treated for lung inflammation and advised to take it easy for a few days. He refused to stay in hospital for observation. No symptoms of DCI were experienced. A subsequent examination of the diver's equipment revealed that the manifold had in fact been closed and he had one cylinder of gas remaining.

October 2009 10/023

A diver felt unwell whilst kitting up and decided not to dive. His buddy joined another pair of divers who were ready at the same time. After the divers had entered the water the diver who had been unwell felt better and stood up, he then passed out and was unconscious for a few minutes during which time the boat skipper called for a lifeboat. The lifeboat attended and the diver was checked by a doctor and taken to hospital for checks. The diver was found to have been taking painkillers for a knee injury and had taken a small amount of alcohol with them the night before. The diver was found to have been suffering from severe dehydration.

October 2009 10/028

A diver who had not been diving collapsed onboard a charter boat. A 'Mayday' call was made and a lifeboat was launched. The casualty was transported to the shore and transferred to hospital.

October 2009 10/026

A diver injured her back whilst trying to get into a semi-drysuit.

November 2009 10/047

During a dive to a maximum depth of 24m a diver under training panicked after 23 min and made a rapid ascent from a depth of 14m. The diver was reported to have been coughing up blood and was taken by ambulance to A&E for a chest x-ray and was released later the same day.

November 2009 10/029

A lifeboat was launched to assist a diver who had got into difficulties whilst diving a wreck. The diver was recovered unconscious onto the charter boat he had been diving from and then transferred first to the lifeboat and then to a rescue helicopter, which airlifted him to the local hospital. Once his condition had been stabilised he was transferred to a larger regional hospital to recover.

November 2009 10/031

A student and instructor had completed a dive on a wreck and left to swim along the bottom back to the shore when the student had 100 bar remaining in their cylinder. As they left the wreck the student banged his knee on the side of the wreck but did not inform the instructor. Due to the pain the student's breathing rate increased and the student ran out of air 4-5 min later. The instructor provided an alternate source and an uneventful ascent using the alternative air source was carried out taking 4 min from 20 m to the surface including a pause at 6m. At the surface the student manually inflated his BCD and the pair swam back to shore. By the time they exited the water the pain in the student's knee had gone.

January 2010 10/050

A pair of divers enjoyed an uneventful a dive to a maximum depth of 28m with a gradual ascent back up an underwater slope for a total dive time of 40 min including safety stops. The divers were fine after the dive but, after a scramble out at the exit point, one of the divers, who was wearing twin 10 litre cylinders, felt nauseous when he got back to his vehicle. The diver removed his equipment but, after standing up quite quickly, fell to the ground. The diver then reports to feeling fine again apart from being cold after the dive. As a precaution the diver self

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administered oxygen and contacted the diver helpline for advice. He was advised that he had not suffered DCI but had suffered a form of shock and was advised that he did not require further medical treatment.

January 2010 10/057

A diver felt unwell after a dive due to the cold.

January 2010 10/052

A diver completed a 45 min dive to a maximum depth of 24m. After the dive the diver started to feel unwell and complained of a tightness in his chest. The symptoms started to ease after 10-15 min. The diver was advised to seek medical attention.

February 2010 10/068

A diver descended at a normal rate to a maximum depth of 17m with no problems. On the bottom his mask kept filling with water. The diver repeatedly tried to clear the mask but was getting water at the back of his throat. The diver became anxious and made a faster than normal ascent. On surfacing the diver had bleeding from his right ear and difficulty breathing. The diver was taken to hospital by helicopter and was checked out by staff from a recompression chamber and A&E. The diver was discharged the same day with slight deafness and was awaiting a referral to an ENT specialist.

April 2010 10/407

Lifeboat launched to help diver with illness. (RNLI report).

April 2010 10/086

A diver had trouble clearing her ears around 23m during a descent to the seabed at 27m. The diver felt able to continue the dive. During the ascent the diver felt in control of her buoyancy until reaching 11m when she felt unable to slow down the ascent and continued up to the surface missing the dive computer's indicated safety stops. On surfacing the diver felt pain in her right ear. On recovery to the boat the diver was placed on 100% oxygen and monitored. On return to shore a recompression chamber was contacted and the diver was advised to attend for an assessment. En route to the chamber the diver developed a pain in her shoulder. The diver received a precautionary treatment in the chamber but there was no change in the shoulder pain and the diver was released with a diagnosis of muscular pain and an ear barotrauma.

April 2010 10/109

A diver suffered chest pains prior to a dive. A 999 call was made and the diver taken to hospital for further tests and treatment.

April 2010 10/074

Two student divers had ear problems during a training course. The first diver complained of sore ears during the night following day three of the course. Medical examination indicated that he had mild bruising but no permanent damage. He was advised to cease diving for a week. The second diver indicated on day five of the course that his ears were 'sticky' and he had decided not to do the final dive of the course. He did not seek medical advice as he had no pain but felt unable to clear his ears and had experienced some minor discomfort on previous dives.

April 2010 10/280

Forth Coastguard received a call reporting a dive boat that had returned to shore and had a diver who had suddenly become unwell. Following medical advice from a dive doctor, the diver was airlifted by rescue helicopter R-177 to Aberdeen Royal Infirmary for treatment. (Coastguard report).

April 2010 10/281

Forth Coastguard received a call reporting a diver onshore who was feeling unwell. An ambulance and Eyemouth CRT attended the diver on scene and he was later airlifted by rescue helicopter R-177 to Aberdeen Royal Infirmary for treatment. (Coastguard report).

April 2010 10/111

A diver had completed a 31 min dive to a maximum depth of 6m. On surfacing the diver struggled to breathe and complained of a tight chest. The diver was given 100% oxygen but did not improve and so a 999 call was made. The diver was taken by ambulance to hospital where it was discovered that he had suffered a spontaneous pneumothorax a couple of days earlier. Diving had made the condition worse.

April 2010 10/091

A pair of divers entered the water to dive close to a fort structure from a charter vessel but were unable to descend. One diver was recovered without problems using the boat's stern lift. The second diver got onto the lift but the boat had drifted close to the wall of the fort. The skipper attempted to push the boat off and in doing so slipped and fell onto the diver on the lift. The skipper grazed his leg. The diver suffered pain in his neck and shoulders. During the recovery of the rest of the dive party the diver also became cold. The diver was taken to hospital by ambulance for x-rays and a check-over and was discharged the same day.

May 2010 10/083

A pair of divers completed an uneventful shore dive to a maximum depth of 14m for a duration of 20 min. On surfacing one of the divers had difficulty catching his breath and started to panic. His buddy started towing him to shore and this was reported to the Coastguard. A rescue helicopter was tasked but then stood down when it was clear that both divers were safely ashore and that neither had experienced a fast ascent. (Coastguard report).

May 2010 10/101

An instructor and two students conducted two training dives of 7m for 8 min and, 94 min later, to 19m for 18 min with no problems reported. After returning home one of the students contacted the club training officer 3 hours after the last dive. He reported symptoms of a rash on the back of his hand and 'pins and needles' in the hand. The diver was advised to contact the DCI helpline and he was advised to go to immediately to a recompression facility. The diver attended a recompression chamber and was recompressed. There were no changes in symptoms and it was suggested that the symptoms may be due to an allergy or some other cause.

May 2010 10/102

A diving charter vessel called the Coastguard asking for a connect call with a recompression chamber for advice. A diver had descended down to 30m and then come straight back up. The diver complained of a tight throat and was severely out of breath. It took 6 min to get his breath back. The diver also complained of pain in the shoulder. The diver was advised that it was not a DCI and that on return to shore he seek further medical advice. (Coastguard report).

May 2010 10/244

During a dive to a maximum depth of 14m a diver suffered cramp in his foot and was unsure of his location and so panicked. Oxygen was given.

June 2010 10/119

A group of three divers were preparing to dive from a 7m RHIB. A shotline had been deployed and the divers prepared to enter the water two from the same side of the RHIB and one from the other. On the signal to enter the water one of the two divers on the same side entered the water ahead of the other. As he surfaced he was hit on the forehead by the left hand cylinder of his buddy's twin-set. The first diver signalled for assistance and was recovered back into the RHIB. First aid was applied to stop bleeding and the diver was returned to shore and taken by vehicle to hospital for treatment.

June 2010 10/123

A diver had completed a dive the day before the incident to 30m for a total dive time of 10 min. On the day of the incident the diver entered the water with her buddy to dive a wreck. The diver experienced a free flow from her octopus regulator. The charter boat she was diving from had just moved away when she waved from the buoy marking the wreck. The skipper came alongside her and lowered the dive lift ladder. The diver looked very panicked. The skipper told the diver to hold on to the ladder but she was unresponsive. The skipper instructed her a number of times how to use the lift. When asked if she understood she said 'No' and then said she was exhausted. The skipper of another charter vessel with a stern lift then positioned his boat alongside and assisted the diver onto the lift by standing on the lift himself. The diver was recovered from the water and subsequently airlifted to hospital by helicopter. The diver is reported to have swallowed water whilst panicking on the surface. (Coastguard report).

June 2010 10/311

Dive boat reported a diver suffering from possible DCI off Lossiemouth Harbour, Moray Firth. Diver met by Lossiemouth Coastguard rescue team and an ambulance on entrance to harbour and was transported to Dr Grays Hospital, Elgin where it was assessed he did not need a recompression chamber. (Coastguard report).

June 2010 10/122

A diver surfaced from a dive to a maximum depth of 40m for a total dive time of 80 min and having completed 37 min of decompression stops. The diver was using a rebreather with trimix 8/42 as the diluent gas. On returning to the dive boat using a diver lift the diver complained of feeling unwell, dizzy and sick. He reported that he had begun to feel ill during the decompression stops, feeling sick and dizzy when he moved his head. The diver was de-kitted, sat down and placed on 100% oxygen for 45 min. During this time the diver became very cold and white on a couple of occasions. Initially he spoke incoherently and was very out of breath. Some improvement was seen after 10 min on oxygen and then fluids were given and the diver continued to improve. The Coastguard was called and they arranged for the diver to be transferred to a recompression chamber by helicopter. The diver was diagnosed with a mild inner ear barotrauma but did not require recompression.

June 2010 10/318

A dive support boat called 'Mayday' reporting to Falmouth Coastguard that they had two divers aboard having made a rapid ascent from 40m; they had suffered flooding of a full face mask, attempted to switch to an auxiliary feed but failed. Making an emergency ascent they were recovered breathless and bleeding from the eyes and were suffering from shock. Falmouth Coastguard scrambled navy helicopter R-193 who airlifted the two casualties to DDRC in Plymouth for treatment. (Coastguard report).

June 2010 10/133

A diver experienced acute ear pain following a dive to 50m using trimix. On returning to shore the diver was transferred to hospital for treatment. The diver has a history of ear problems including an operation involving the reconstruction of the inner ear. (Coastguard report).

June 2010 10/252

A pair of divers conducted a dive at an inland site. During the descent one of the divers had problems clearing his ears at 6m and again at 12m but they eventually cleared. At about 16m the diver's buddy signalled him to go in the direct of one of the site features but received no response and the diver continued a slow descent to the bottom. On the bottom the diver was upright but his eyes were wide and staring and he did not respond to signals. His buddy took hold of him and inflated the diver's BCD but the air escaped immediately due to the pressure exerted on the inflation hose activating the dump built into the top of the BCD hose. The buddy managed to get sufficient air in to initiate a lift and finned to aid the ascent. On the surface he made the diver buoyant and filled his own BCD then towed the diver to the shore where others assisted in the recovery from the water. The diver was checked out and recovered but could not remember what had happened.

June 2010 10/327

Falmouth Coastguard was alerted to a diver who had surfaced from a 9m shore dive for 30 min coughing up blood, Porthoustock CRT attended and assisted the casualty into the air ambulance for onward transportation to the DDRC Plymouth. (Coastguard report).

July 2010 10/200

During a dive to 37m for 50 min a diver experienced pain on ascent at a depth of approximately 20m. After the dive the dive manager noticed blood on the outside of the diver's ear and the diver complained of a loss of hearing. On return to the shore the diver had some minor pain and discomfort but his orientation was good. The diver consulted his doctor who confirmed he had perforated his eardrum. Five weeks later the diver's ear had recovered and he had returned to diving.

July 2010 10/163

Whilst a diver was fitting his fins in preparation for diving from an RHIB he slipped at an angle and his cylinder landed on the hand of another person onboard trapping this person's hand between the cylinder and the tube. After the divers had entered the water the injured person was sick and complained of the pain getting worse. Medical attention was sought and the diver diagnosed with injured tendons in his hand.

July 2010 10/212

A diver was returning onto a dive boat via a diver lift when the skipper dropped the lift straight down to it's lowered position before the diver had stepped off onto the deck. The diver was in full kit and suffered jarring which caused ligament damage to the right knee. The diver had also removed her regulator and swallowed a small amount of water causing her to cough. The diver's buddy who was still in the water went to her assistance. A diver from another boat also swam over to assist and the diver was towed back to the charter boat and recovered using the diver lift without further incident. The diver was treated at a local medical centre before returning home.

July 2010 10/174

A diver conducted two dives during the day. Dive 1 28m for 30 min including a 3 min safety stop, 3 hours later Dive 2 20m for 40

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min including a 3 min safety stop. On returning to harbour the diver removed her drysuit and complained of feeling hot. After 20 min she felt dizzy, had a headache, joint pain and loss of energy. Her dive group laid her down, administered oxygen and called an ambulance. The ambulance crew checked her over and allowed her to travel back to a local campsite with the advice to seek medical help if further symptoms appear. No further ill effects were experienced and the diver believes she was dehydrated.

July 2010 10/165

A diver conducted a series of shallow dives, 8m for 30 min, 10m for 40 min & 12m for 40 min. After getting back onboard the charter vessel following the final dive the diver started coughing and retching. He had enlarged tonsils and had trouble breathing through his mouth. The diver was airlifted to shore and checked out by a specialist dive doctor and an ambulance crew. The diver was diagnosed with inflammation at the top of the throat and that it was not a diving problem. (Coastguard report).

July 2010 10/343

Forth Coastguard received a call from Ambulance control advising of a diving casualty at St Abbs. A link call between the casualty and the dive doctor at Aberdeen could not be made due to bad signal and a decision was made by the ambulance technician that medical evacuation was not necessary as it appeared to be a viral infection. Rescue helicopter 177 and Eyemouth Coastguard rescue team were stood down and returned to station. (Coastguard report).

July 2010 10/169

A diver carried out an uneventful dive on a wreck to a maximum depth of 17m for 61 min total dive time including a safety stop but no mandatory stops. During the boat journey back to shore the diver experienced some numbness and tingling in his legs and then his back. After returning to shore and unloading equipment the diver asked to use oxygen as a precaution. The diver breathed 100% oxygen for 15 min after which the tingling eased. No further symptoms were experienced and no further action was deemed necessary. The symptoms were attributed to rough seas and a challenging RHIB journey to the dive site.

July 2010 10/184

Whilst transferring equipment onto a dive boat a diver fell down the gap between the pontoon and the boat. The diver suffered a severe blow to the lower shin and minimal bleeding. Attendance at A&E for an x-ray revealed no broken bones and the diver was advised to rest the leg.

August 2010 10/421

Lifeboat launched to help diver with illness. Person brought in. (RNLI report).

August 2010 10/235

Following a pool session a diver slipped down two stairs on to the poolside injuring her left hip and grazing her left elbow. The diver was in pain and unable to be moved and an ambulance was called and transported the diver to hospital where an x-ray revealed no broken bones. The diver was admitted to hospital and was awaiting a scan.

August 2010 10/248

Following a pool session a diver stood on a low window ledge to hang up a T-shirt to dry. He slipped and caught his foot on a broken window tile cutting and bruising the skin. The diver was advised to attend A&E due to the severity of the injury.

August 2010 10/203

A student diver and her instructor had successfully completed the student's first sea dive to a maximum depth of 15m and a total dive time of 33 min including a 3 min safety stop. The student was positioning herself on the diver lift of the charter boat they were diving from and gripped the track. The lift was actuated before the student was fully on it and her hand was caught between the lift basket and the track and crushed. The wound was cleaned and two plasters were applied; once ashore a bandage was applied. On return home the student visited A&E and x-rays confirmed there were no breaks.

August 2010 10/378

Liverpool Coastguard coordinated the recovery by ambulance of a diver suffering from suspected DCI following a dive to 41m, to a recompression chamber. Possible jelly fish sting on way up that he may have reacted to, so may not be DCI. (Coastguard report).

August 2010 10/383

Falmouth Coastguard tasked Falmouth lifeboat to a dive RHIB which had a diver aboard who had surfaced and swallowed or inhaled a lot of water at the surface, the lifeboat brought the casualty back to Falmouth where it was met by a waiting ambulance for onward transportation to Royal Cornwall Hospital Treliske. (Coastguard & RNLI reports).

August 2010 10/215

A diver from another boat was seen being towed on the surface and the pair were asked if they needed any assistance. The person towing declined and dismissed any offer of help. There was no mention made of the third person who had been in the party but was no longer with them. A few moments later a shout for help was heard as the diver being towed had stopped breathing. The pair were recovered aboard a charter boat and resuscitation efforts commenced. A doctor onboard coordinated the efforts whilst giving chest compressions. After about 5 min the diver started breathing again and he was placed on oxygen. During this time a further call for help was heard from a diver assisting a 12 year old boy whose BCD was not giving him proper support. Another diver entered the water and assisted the recovery of the boy into the RHIB that he had been diving from. He was later transferred to the charter boat and comforted as it was his father who had been resuscitated. The father and son were transferred to hospital by a helicopter.

August 2010 10/217

A diver and two buddies conducted a wreck dive to a maximum depth of 26m. During the dive the diver was seen to be over-weighted but he coped with buoyancy control throughout the dive. The divers completed a 3 min safety stop at 6m. On reaching the surface the diver inflated his BCD but his head would not clear the water due to the excess weight he was carrying and the BCD being too large. The water was choppy and the diver started to panic and let go of his regulator. The diver inhaled water as a wave washed over him and he grabbed one of his buddies. The buddy tried to calm him down and instructed him to replace his regulator which he did. The buddy then towed him towards the charter boat but as he approached it became apparent that the diver had become unconscious. The buddies, together with the boat skipper, managed to manoeuvre the diver onto the diver lift and raise him to deck level and started CPR. Other boats came to assist and the Coastguard was called for assistance. After about 5 min of CPR the diver started breathing again normally and was administered oxygen. The diver was taken to the shore and transferred by ambulance to hospital where he was kept overnight for observation and then discharged.

September 2010 10/250
A diver tripped over in the car park of an inland dive site suffering a laceration to the right knee. First aid was given and he was advised to seek extra care from a minor injuries clinic.

September 2010 10/397
Forth Coastguard received a routine call from a dive boat reporting a diver onboard suffering from suspected DCI with pains in his back. Whilst the vessel made her way into harbour a connect call was established with the dive doctor at Aberdeen. It later became evident that the problem was not dive related and after being checked over by ambulance technicians all units were stood down. Eyemouth Coast Rescue team in attendance. Safety advice given to skipper of dive boat. (Coastguard report).

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Boating & Surface Incidents

October 2009 10/013

A lifeboat was launched to assist divers after a member of the public reported that divers were at risk of being swept out to sea south of a harbour entrance. Two divers, who had been diving from the shore, were reported as having difficulty returning due to strong currents and offshore winds gusting to 50 knots. The lifeboat located two divers, recovered them aboard and returned them safely to shore. The lifeboat then stood by looking for two other divers who were yet to surface. The second pair of divers made their own way back to shore and landed safely with Coastguard assistance.

October 2009 10/012

A 999 call to the Coastguard was made reporting three divers waving and blowing whistles, trying to attract the attention of their support RHIB. The Coastguard scrambled a helicopter and called other craft in the area to assist. The helicopter, once on scene, spotted one diver and SMB and two other divers close to the shore. A local charter RHIB picked up the single diver and the pair of divers made the shore without assistance. The helicopter winch man was lowered to the beach to speak to the pair of divers. The divers explained that they had lost one of their SMBs and had been trying to attract the attention of their cover boat. The cover boat had moored in the next bay and it was not possible to establish the reason as the divers and their boat cover did not speak very good English. (Coastguard report).

October 2009 10/254

Portland Coastguard received a call from a dive boat reporting that they had broken down and were drifting and still had divers in the water. Swanage AWLB & ILB were tasked to proceed to assist, but while they were on route the boat called back to advise that he had been able to get his engine started and return to shore without any further assistance. (Coastguard report).

October 2009 10/018

Two divers experienced engine failure of their 6m RHIB after diving. The Coastguard was called in worsening weather conditions and RNLI all weather and inshore lifeboats were launched to assist. The RHIB was located 1.5 miles south east of the dive site and the vessel was towed to the local marina. (RNLI report).

October 2009 10/255

Humber Coastguard received a call from a dive boat reporting that they had broken down, but did not have divers in the water. However, shortly after making the call they reported back that they had fixed the problem and were again underway. (Coastguard& RNLI reports).

October 2009 10/022

A group of divers were returning from a wreck dive in their RHIB when they heard a call for help. The call came from a 50ft boat that was drifting dangerously close to rocks in choppy seas. The boat had been incapacitated due to a mooring rope fouling the propeller. After assisting the boat safely to shore the divers checked under the boat and found a rope tightly wrapped around the propeller shaft and they took turns in cutting it free.

October 2009 10/257

Brixham Coastguard received a call from a dive boat reporting they had broken down and still had two divers in the water. Plymouth AWLB was tasked to proceed and provide assistance. The divers were recovered before the lifeboat arrived. On arrival the lifeboat took the divers onboard and towed the boat back to harbour. (Coastguard & RNLI reports).

October 2009 10/259

Falmouth Coastguard received a 999 call from a dive boat reporting that they had a solo diver who was 10 min overdue to surface. The boat had carried out a search but had been unable to locate him. A broadcast was made to all boats in the area and Falmouth AWLB and rescue helicopter R-193 were tasked to commence a search. However, before the lifeboat and helicopter arrived on scene, it was reported that the diver had been seen on the surface by a yacht. The yacht was unable to recover him, so he was winched up by the rescue helicopter and transferred to the AWLB to be taken to the lifeboat station to receive medical treatment. (Coastguard & RNLI reports).

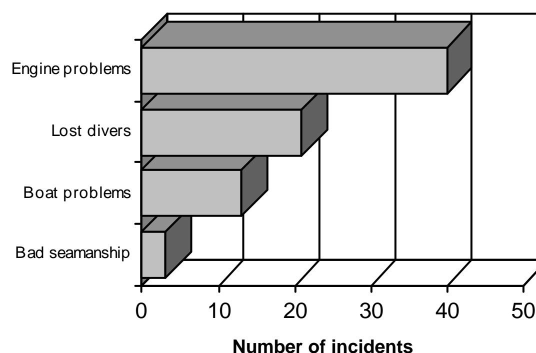
October 2009 10/261

Stornoway Coastguard received a 999 call from the shore contact of a dive boat reporting that they had a missing diver. While resources were being tasked, rescue helicopter R-100 which was on exercise in the area was tasked to commence a search. However, very shortly after, it was reported that the diver had been found safe and well. (Coastguard report).

December 2009 10/406

Two lifeboats launched to assist with overdue dive boat. Others coped. (RNLI report).

Analysis of boating & surface incidents



February 2010 10/268

Brixham Coastguard received information that a dive RHIB had been towed back to harbour by a police RHIB following electrical failure. (Coastguard report).

March 2010 10/071

During a boat handling course a student was practicing high speed turns. The instructor was standing immediately behind the student issuing instructions and maintaining an all-round view for other craft in what could be a busy channel. The student made a turn that was sharper than previous turns and the instructor became unsteady but was holding onto a strongpoint so did not fall over. The student then made a turn in the opposite direction and hit a wave causing the already unstable instructor to go over the side of the boat. His lifejacket inflated automatically and his clothing insulated him well. The student manoeuvred the boat and collected the instructor at the first attempt. The instructor went ashore and changed clothing and continued with the course.

March 2010 10/271

Brixham Coastguard received a call from a group of dive boats reporting that one had broken down. They were able to make their own tow, so Brixham Coastguard monitored their progress until they reported they had arrived back in harbour safe and well. (Coastguard report).

April 2010 10/408

Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

April 2010 10/275

Milford Haven Coastguard received lots of 999 calls about three divers who had been spotted about 400m from shore drifting and possibly in difficulties. Aberystwyth ILB and rescue helicopter R-122 were tasked to proceed to the position and Aberystwyth CRT to meet with informants on the shore side. On arrival on scene, the CRT reported that there were in fact five divers in trouble and they were attempting to make their own way back to shore. Two made it back and three were picked up by the ILB before the helicopter arrived. The divers had been caught in a rip current. They were attended to by an ambulance to ensure that there were no medical problems. (Coastguard & RNLI reports).

April 2010 10/088

A dive boat with six divers onboard suffered sudden engine failure. The boat anchored and fired red flares. A lifeboat was launched to assist. (RNLI and media report).

April 2010 10/276

Liverpool Coastguard received a call from a dive boat reporting two missing divers. Lifeboats from Port Erin, Port St Mary, the ALB from Douglas IOM, rescue helicopter R-122, the missing diver's boat and one other dive boat in the area were tasked to search for the missing divers. They were found by one of the dive boats about 20 min after they had been reported missing. They were spotted and picked up by their own boat. They were able to complete all stops and suffered no ill effects, and required no medical attention. It seems that out of three pairs of divers, the missing pair got swept away from the area where they were expected to surface and were not spotted when they did. (Coastguard & RNLI reports).

April 2010 10/410

Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

April 2010 10/081

A charter boat with ten persons onboard reported having suffered engine failure. An RNLI lifeboat was diverted from a training exercise to tow the vessel back to harbour. The problem was later identified as a faulty kill cord. (Coastguard Report).

April 2010 10/082

Three divers were diving from the shore and reached a maximum depth of 8m. During the dive the current picked up and one diver became separated from the other two. The diver surfaced safely after a total dive time of 30 min. The other divers when they noticed their buddy was missing looked for him for one minute and then surfaced after a total dive time of 52 min and found their buddy already safely on the surface. The divers then tried to swim back to shore but realised that the current was too strong and signalled their shore cover who raised the alarm. The Coastguard was contacted and a local vessel recovered the divers and returned them to shore where they were met by local coast rescue officers. (Coastguard report).

April 2010 10/282

Stornoway Coastguard received a call from a boat reporting he had lost sight of one of his divers in fog. A 'Mayday' broadcast was made, and a major search was instigated using the CRT and ALB from Barra, rescue helicopter R-100, another vessel and the boat who had the diver missing. The diver was found about 20 min after being reported missing. It seems he had taken a bearing and headed towards land and was found on some rocks, safe and well. (Coastguard & RNLI reports).

May 2010 10/284

Falmouth Coastguard received an unreadable 'Mayday' call which turned out to be from a dive boat in Brixham Coastguard's area reporting that they had engine failure and were taking water. There was a dive festival taking place in the area, so it could have been one of several boats out. Fowey AWLB, Mevagissey CRT and rescue helicopter R-193 were tasked to proceed. A yacht in the vicinity responded to the 'Mayday' call and also went to assist. However, before the helicopter and lifeboat arrived, the boat was able to report they had made it back to shore under escort of another dive boat. The boat was met by the CRT back at the beach. (Coastguard & RNLI reports).

May 2010 10/286

Brixham Coastguard received advice from the lifeguards of a dive boat stuck on the sand on a beach after it had been loaded onto a trailer following breakdown. Tamar CRT went to the scene to assist with recovering the boat and trailer from the beach. (Coastguard report).

May 2010 10/288

Brixham Coastguard received a call from a dive boat reporting they had engine failure and still had a diver drifting in the water. A yacht and a dive boat responded to the Coastguard broadcast requesting assistance, and the dive boat was able to recover the diver and return him to his own boat. Torbay lifeboat was sent to the assistance of the broken down boat and towed it back to harbour, where they were met by Torbay CRT. (Coastguard & RNLI reports).

May 2010 10/411

Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

May 2010 10/292

Portland Coastguard received a call reporting a diver in the water waving and blowing a whistle. Rescue helicopter R-104

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and Weymouth ILB were tasked to proceed and investigate. However, before they arrived on scene a nearby dive boat spotted him and he was recovered safely. (Coastguard report).

May 2010 10/291

Solent Coastguard received a call from a dive boat reporting they had broken down but had no divers in the water. A nearby boat offered assistance and towed them back to harbour. (Coastguard report).

May 2010 10/427

Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

May 2010 10/115

A diver was reported missing by his dive boat. Several vessels assisted with a search including four lifeboats and an SAR helicopter. The diver was spotted by a ferry and picked up by helicopter and transported to hospital for checks. The diver was recovered 6-7 miles from his last known location having been drifting on the surface for approximately 2 hours.

May 2010 10/299

Dive RHIB reported a diver overdue 4.5 miles NW Bude. Bude ILB and Padstow ALB were tasked, but stood down when the diver was reported safe on the surface. (Coastguard report).

May 2010 10/300

Dive boat reported engine failure with three divers in the water off Penlee, Plymouth Sound. RHIB Dunribbin was alongside the disabled RHIB. Dunribbin towed the stricken craft to Mount Batten Centre. (Coastguard report).

May 2010 10/302

Holyhead Coastguard received a call from a vessel reporting two divers who were overdue. The divers were located and it was confirmed that neither diver appeared to require any medical assistance, other divers were in the water with them and neither appeared to be showing symptoms or had indicated a missed stop. Both divers recovered safe and well. (Coastguard & RNLI reports).

June 2010 10/306

Thames Coastguard was alerted to a missing solo diver, close to Thanet wind farm, several assets were tasked including those of the wind farm, a large scale search was coordinated by Thames Coastguard operations room. The diver was diving the wreck of the Emille Dechamps and was adrift for 2 hours before being recovered by rescue helicopter R-125. (Coastguard & RNLI reports).

June 2010 10/309

Brixham Coastguard was alerted by a dive support vessel having suffered engine failure and who were unable to recover divers, a Torbay Council workboat recovered the divers and the stricken vessel was towed back toward port by another local boat, the tow being taken over by Torbay lifeboat. (Coastguard & RNLI reports).

June 2010 10/412

Lifeboat launched to assist stranded dive boat. Craft towed in. (RNLI report).

June 2010 10/317

Milford Haven Coastguard received a call from a member of the public, reporting two divers in difficulty whilst conducting a shore dive, the divers became separated 15 min into their dive and were heard shouting. Milford Haven tasked Dale Coastguard team and Littlehaven lifeboat to assist. Once reunited they carried out their dive with no ill effects, Dale Coastguard gave advice to use an SMB on a shore dive. (Coastguard & RNLI reports).

June 2010 10/316

Brixham Coastguard was contacted by a dive support vessel having broken down with divers in the water, Brixham tasked Salcombe lifeboat to tow the stricken vessel back to port having recovered the divers from the water. (Coastguard & RNLI reports).

June 2010 10/319

Brixham Coastguard tasked Exmouth RNLI inshore lifeboat, Exmouth Coastguard to search for two divers overdue on a dive trip. Exmouth lifeboat and rescue helicopter R169 from Chivenor were called but stood down when the divers were located by the inshore boat at Straight Point, safe and well fishing. (Coastguard report).

June 2010 10/413

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

June 2010 10/134

The Coastguard received a call from a dive charter vessel that an RHIB had lost two divers. Another boat reported they had recovered two divers and were returning them to their RHIB. The divers had been diving at 12m and had intended putting up their SMB just before surfacing. The divers had surfaced and could not see their RHIB and so had swum ashore and then realised that their RHIB was too far away and were picked up by another vessel. The RHIB had been drifting with it's engine switched off and had drifted approximately 1 nautical mile away. (Coastguard report).

June 2010 10/150

A dive RHIB with seven divers onboard experienced severe flooding when the self bailer sock became detached. Temporary repairs were effected and the boat escorted back to harbour. Investigation revealed that the auxiliary engine when lowered was hitting the tubing and over time had knocked the tube back to the extent that there was nothing for the sock to locate to. Adjustments have been made to prevent reoccurrence.

June 2010 10/151

Two divers entered the water from an RHIB and began descending down the shotline. One of the divers became tangled in the trail line. The divers ascended to clear the line. At the same time a yacht in full sail ran over the shotline pulling both divers to the surface and they both bounced along the hull of the yacht. One diver lost her mask but the yacht made no attempt to stop. The RHIB recovered the divers who were both shaken but not injured. The yacht sailed into the distance and then dropped anchor. After the remaining divers in the group were recovered the cox drove over to the yacht and challenged the crew of three over the incident. None had noticed the shot, marked by a large tub, or the RHIB and did not know what the 'A' flag was supposed to signal and admitted they had not been looking. The crew apologised to the divers concerned and agreed to be more observant in the future.

June 2010 10/137

A 6.5m RHIB suffered engine failure, due to a split fuel pipe, whilst they still had two divers in the water. The skipper tried to contact the Coastguard via VHF radio but the radio failed due to a blown fuse. Contact was made using a mobile phone which gave a weak signal but allowed sufficient detail for a rescue helicopter to be tasked. The helicopter located the divers' SMB, which could no longer be seen by the divers' boat, and hovered over the location. A lifeboat, also tasked by the Coastguard, recovered the divers and returned them safely to their RHIB which was then towed back to harbour. (Coastguard & RNLI reports).

June 2010 10/414

Lifeboat launched to assist dive boat. Problem resolved unaided. (RNLI report).

July 2010 10/178

A dive boat with ten people onboard suffered engine failure and called the Coastguard for assistance. The boat was towed back to harbour by another vessel. Investigation revealed the problem was caused by a water pump failure. (Coastguard Report).

July 2010 10/329

Solent Coastguard were alerted by a dive boat that they had lost two divers; the divers were recovered safe and well shortly after the call was made. (Coastguard report).

July 2010 10/238

A 5m RHIB was anchored on a wreck with the last pair of divers in the water when the engine wouldn't start. The Coastguard was contacted by VHF radio to make them aware of the situation. Whilst attempts to start the engine were made without success a lifeboat was scrambled. Worsening sea conditions prevented further attempts to start the engine. The divers surfaced and were recovered to the boat. The lifeboat towed the RHIB back to shore.

July 2010 10/158

The Coastguard received a call from a dive boat taking on water. The vessel had divers in the water which other vessels in the area were in the process of recovering. A lifeboat was launched and they assisted another vessel to take the boat under tow back to harbour. It was reported that some dive equipment had punctured the port side sponson of the RHIB. (Coastguard & RNLI reports).

July 2010 10/331

Staithes lifeboat and Staithes Coastguard were tasked by Humber Coastguard to assist two scuba divers who were reported in difficulty by a MOP due to adverse weather. The divers made it safely to shore unaided. (Coastguard & RNLI reports).

July 2010 10/333

Humber Coastguard was contacted by the police for two divers who appeared to be in difficulties off Marsden Grotto in adverse weather. Sunderland Coastguard, South Shield VLB and lifeboats from Tynemouth and Cullercoats were tasked to assist as the divers appeared to be drifting and were waving an orange flag. Rescue 131 was also tasked but the divers were recovered safely by their support boat and all units stood down. (Coastguard & RNLI reports).

July 2010 10/179

A group of divers entered the water in a tidal area for the final dive of a trip. The original site planned was not used due to marginal surface conditions. All divers were briefed to remain in shallow water around some wreckage and if they experienced any current that they should immediately deploy a delayed SMB. Five buddy pairs entered the water from a charter vessel which was accompanied by a RHIB. The brief was for a maximum dive time of 1 hour. One pair of divers experienced a moderate current after 30 min and deployed a delayed SMB. They continued for a further 10 min and then ascended and conducted a 6 min safety stop at 6m. On surfacing the divers were approximately 300m from the charter vessel but could not attract attention. The RHIB was not in sight. The divers deployed an extendable flag as well as a fully inflated delayed SMB and tried a whistle, an air horn and shouting but could not attract the attention of people in the wheelhouse. The divers drifted on the surface for 30 min across a channel and eventually climbed out onto some rocks. Meanwhile all the other divers had returned to the charter vessel and, realising the missing divers were overdue, the RHIB was dispatched to search down current for the missing divers. After around an hour of searching the divers were spotted on the rocks by the RHIB and recovered after they swam out to the RHIB. The divers had been spotted on the shore by walkers who had alerted the Coastguard by mobile phone. The Coastguard requested a lifeboat to launch to assist. The lifeboat met the boat as it was returning to harbour and escorted them back.

July 2010 10/336

Yarmouth Coastguard maintained a watching brief on 5m dive RHIB, after a report of engine failure approximately 1/2 mile off Sea Palling. Vessel made shore safely unaided. (Coastguard report).

July 2010 10/335

Brixham Coastguard maintained a communication watch on a local diving club boat, two persons onboard, whilst they made passage from Salcombe to Torquay with gear box problems. (Coastguard report).

July 2010 10/415

Lifeboat launched to assist dive boat that was out of fuel. Craft brought in. (RNLI report).

July 2010 10/166

Liverpool Coastguard received a 'Mayday' call from a dive support vessel reporting two missing divers in the Mull of Galloway area, Liverpool took broadcast action on behalf of the vessel, and made a search plan using SARIS with the aid of Holyhead Coastguard. A search area was derived using SAR rescue helicopter R-177 and lifeboats from Portpatrick. The divers were located some distance from their boat by the helicopter which recovered them from the sea. (Coastguard report).

July 2010 10/416

Lifeboat launched to assist dive boat. (RNLI report).

July 2010 10/341

Dive support vessel reported to Solent Coastguard that they had a diver missing, the diver was solo diving after being separated from dive buddy, the diver had been in the water for 30 min. Bembridge Coastguard team were tasked to observe from the shore, before other units could be tasked the diver turned up and was recovered by the support vessel. (Coastguard report).

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July 2010 10/167

Whilst trying to unclip a stern securing line from a riser mooring a crewman was thrown overboard by the boat movement in a heavy swell. The crewman's lifejacket inflated supporting him. The crewman was able to make his way to a ladder and from there back onboard the boat. No ill effects were encountered.

July 2010 10/168

A boat made an emergency call on VHF channel 16 reporting three divers overdue. The Coastguard tasked a SAR helicopter and a number of other vessels assisted. Shortly after arriving on scene the helicopter located the divers and they were subsequently picked up by their parent craft. The skipper of the boat was a bass boat skipper and had not seen the SMBs come up and lost sight of the divers. (Coastguard & RNLI reports).

July 2010 10/417

Two lifeboats launched to assist stranded dive boat. (RNLI report).

July 2010 10/344

Stornoway Coastguard was alerted by a dive support vessel that they had suffered steering failure with a diver still in the water, Stornoway Coastguard tasked Stornoway lifeboat to assist, the diver was recovered and the vessel towed back to port where it was met by Stornoway CRT. (Coastguard report).

July 2010 10/418

Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

July 2010 10/348

Humber Coastguard was alerted that a diver had gone missing whilst on a night dive; Humber Coastguard tasked Seahouses lifeboat and brought RAF rescue helicopter to immediate readiness. The vessel called up to say the diver has been located and the boat was making her way to port. The vessel was met by Seahouses CRT. (Coastguard & RNLI reports).

July 2010 10/419

Two lifeboats launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

July 2010 10/354

Holyhead Coastguard was made aware of two divers in trouble part way between Ravens and Porth Diane grid 860909, blowing whistle and waving, wearing black wetsuit and hoods. Holyhead Coastguard tasked Trearddur Bay lifeboat to assist the two divers and Holyhead Coastguard team; the divers were recovered safe and well and returned to shore, where they were met by the Coastguard team. (Coastguard & RNLI reports).

August 2010 10/360

Solent Coastguard was informed of a number of divers being swept close to a breakwater in heavy surf, Solent Coastguard tasked Newhaven lifeboat to assist the divers, all five were recovered and returned safely to shore. (Coastguard & RNLI reports).

August 2010 10/359

Holyhead Coastguard was alerted by a vessel that they had come across three divers adrift and they were preparing to recover them, the parent vessel arrived on scene and the divers were reunited with their parent vessel safe and well. (Coastguard report).

August 2010 10/195

A boat with seven people onboard experienced engine overheating due to a seawater cooling pump impeller failing. The boat was anchored and the impeller replaced but the engine failed to restart. The Coastguard was called for assistance and a fishing charter boat attended and towed the boat back to harbour. Subsequent examination found that the exhaust system had melted and the electrical connections to the starter motor had come loose. Both were repaired and the boat returned to service.

August 2010 10/355

Brixham Coastguard tasked Plymouth lifeboat to tow a broken down RHIB with five divers aboard back to shore; the tow was met by Plymouth CRT. (Coastguard & RNLI reports).

August 2010 10/197

A dive RHIB had five divers in the water on a wreck dive when the boat suffered a complete loss of steering. A quick check indicated that it would not be a simple fix and the Coastguard was contacted for assistance. The Coastguard tasked a lifeboat to assist. Another RHIB in the area offered to help but the Coastguard confirmed that the lifeboat would still be deployed. An inshore lifeboat arrived on site and recovered the divers and transferred their equipment to the RHIB and then took them ashore. The lifeboat then returned and towed the RHIB back to harbour. The other RHIB recovered the first boat's shotline for them and remained available to assist.

August 2010 10/422

Two lifeboats launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

August 2010 10/368

Dover Coastguard was alerted by a dive support vessel that had suffered engine failure, with eight POB, six were transferred to a lifeboat which towed the stricken craft to shore. (Coastguard & RNLI reports).

August 2010 10/370

Brixham Coastguard was alerted by a dive support vessel having suffered engine failure with twelve persons aboard; the RHIB was towed back into harbour by a council patrol vessel. Berry Head CRT met the vessel. (Coastguard report).

August 2010 10/373

Brixham Coastguard received a 'Pan Pan' alert from a broken down dive RHIB, the MCA Falcon and another RHIB from the same club responded to the alert, a nearby vessel recovered the divers, the stricken craft was assisted back to shore, and MCA Falcon assisted both RHIBs to shore. (Coastguard report).

August 2010 10/374

Falmouth Coastguard received a call from a dive support vessel that one diver was overdue and missing, Falmouth Coastguard tasked the St Marys lifeboat, RN rescue helicopter R-193 and St Agnes CRT. The diver was located safe and well by the parent vessel. (Coastguard report).

August 2010 10/381

Solent Coastguard was contacted by a dive support vessel

reporting they had broken down with divers in the water. Littlehampton lifeboat was tasked, recovering the divers and towing the vessel to shore. (Coastguard & RNLI reports).

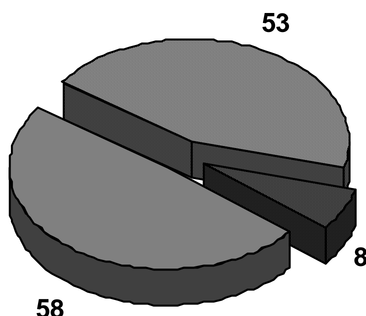
August 2010 10/204

The Coastguard received a call from a converted fishing vessel that was being used as a dive boat that had lost power 12 miles off the coast. The Coastguard tasked a lifeboat to respond. Nothing further was heard until the Coastguard heard another vessel speaking to the vessel which was sinking. The vessel had three persons onboard, one dressed in a diving suit and a dog tethered onboard. The vessel sank and a lifeboat recovered the three people from the 16 deg C water. Unfortunately the dog went down with the boat. (Coastguard & RNLI reports).

August 2010 10/423

Lifeboat launched to assist dive boat with engine problems. (RNLI report).

Boating & surface incident report source analysis



BSAC Reports (8) Coastguard (58) RNLI (53)

September 2010 10/424

Lifeboat launched to assist dive boat with engine problems. Craft towed in. (RNLI report).

September 2010 10/219

The Coastguard received a call via VHF radio that a dive vessel had two divers 45 min overdue. The call was unclear and Coastguard scrambled a helicopter. Subsequently the dive vessel reported he had located the divers safe and well. The divers were supposed to have attached markers to the wreck but had not done so and the markers had drifted off and the boat had followed them. (Coastguard report).

September 2010 10/388

Clyde Coastguard was alerted to a diver in difficulties following a shore dive, two divers entered the water and surfaced further out from the shore than expected, one diver ditched his kit and swam ashore to raise the alarm, Clyde Coastguard tasked Helensburg lifeboat to proceed, the lifeboat recovered the remaining diver. (Coastguard & RNLI reports).

September 2010 10/392

A dive support vessel reported to Belfast Coastguard that a diver had been swept away on the surface in Strangford Lough, Belfast Coastguard tasked Portaferry lifeboat who recovered the diver and returned the diver to the shore. (Coastguard report).

September 2010 10/393

Yarmouth Coastguard received a call from a dive vessel reporting they had broken down. Cromer lifeboat was tasked to assist the stricken vessel back to port, on arrival the tow was taken by Sea Palling Independent rescue boat. (Coastguard report).

September 2010 10/398

Belfast Coastguard tasked Kilkeel lifeboat at the request of Carlingford Coastguard radio for a dive boat with engine failure at No9 buoy Carlingford Lough, three divers still in the water. Casualty able to restart engine, all divers recovered and proceeded to Greenore with Kilkeel lifeboat escorting. (Coastguard & RNLI reports).

September 2010 10/426

Lifeboat launched to assist dive boat. Problem resolved unaided. (RNLI report).

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Ascent Incidents

October 2009 10/019

Two divers on a night dive to an inshore reef were joined by a third diver whose buddy had experienced an equipment failure before entering the water. During the descent down the shotline the third diver had disentangled the pair's SMB from the shotline. Towards the end of the dive to a maximum depth of 15m the dive leader went to signal to terminate the dive, lost control of his buoyancy and ascended quickly to 5m accompanied by his original buddy. The third diver did not ascend at the same time and after regaining control the lead diver descended back to the seabed and signalled the third diver to ascend. On ascent the lead diver became tangled in his SMB line and lost sight of the third diver. The original buddy and the third diver both surfaced safely and returned to the boat. The dive leader conducted a mandatory safety stop indicated on his computer. Total dive time was 48 min. On the surface the dive leader and his original buddy were placed on oxygen. The dive leader reported a tingling in his right foot. On shore a neurological exam was conducted and advice sought from a Royal Navy diving doctor who advised a further neurological exam at A & E. Attendance at hospital showed no adverse effects but the diver was kept under observation overnight.

October 2009 10/027

At the start of the second dive of a day's training a student diver appeared uncomfortable but was not indicating any problem. The instructor positioned them to gain eye contact but the student seemed preoccupied. The instructor took a grip of the student to give reassurance and gain control whilst unaware that the student had put air into her BCD and the pair started to ascend rapidly. The instructor tried to slow the ascent but the student then removed her regulator. The instructor gave the student his alternate source which the student put in her mouth and then immediately removed it again and appeared to gulp water before bolting for the surface. On the surface the student removed her mask and the instructor gave the distress signal and started towing the student to the shore. Two other divers provided assistance before the site staff took over. Diving medical advice was sought and the student was placed on oxygen, taken into a warm environment and monitored. The student was advised to attend A&E which she did and was discharged with the advice to consult her GP if her condition deteriorated.

November 2009 10/034

A lifeboat was launched to assist a diver from a charter boat who had made a fast ascent from a wreck. The diver was transferred to the local recompression facility but no treatment was required.

November 2009 10/032

Two students and an instructor were on a training dive. Following a slow descent to 12m due to ear problems, one of the students got confused over direction and was seen to roll over onto her back. The second student assisted her back up. During this period the student pressed the purge valve on her alternate source by mistake and caused a slight free flow, she then inflated her BCD. The instructor grabbed hold of a fin as they rose some 3m off the bottom but could not hold on and lost his grip around 6m. The other student was still in sight and the instructor watched the first student to the surface and start swimming to shore. The instructor signalled the other student to ascend and they surfaced a short time later to see the first student being helped from the water by the dive manager. The first student's computer indicated caution due to a fast ascent but had not locked out. The student was given oxygen as a precaution and monitored but no ill effects were experienced.

December 2009 10/049

A diver suffered a fast ascent from 18m 16 min into a dive where a maximum depth of 25m had been reached. The diver was given oxygen but no other symptoms or treatment were reported.

February 2010 10/085

Four divers were conducting a training dive to a maximum depth of 13m. After approximately 20 min the divers rose up off the seabed to practise mid-water delayed SMB deployment. The instructor demonstrated followed by practice by the first two students. The third student was having difficulty maintaining his position and avoiding drifting into the others in the group and their SMB lines and, on a number of occasions, he descended and swam away from the group before returning. When the third student's turn came he prepared his delayed SMB and reel and partially inflated it but did not fully depress the ratchet release. He attempted to regain control by breathing out and repositioning his hand on the reel. His buddies attempted to grab his ankles but were unable to slow his ascent sufficiently. At around 4m the diver released the reel and attempted to dump air from both his drysuit and his BCD but could not prevent his ascent direct to the surface. His computer dive profile showed a fast ascent from 9m to the surface. The diver was recovered by boat and placed on 100% oxygen. He remained on oxygen until he had depleted a D-size cylinder. He was kept hydrated and monitored for the rest of the day without symptoms developing.

February 2010 10/269

Clyde Coastguard received a call from a dive boat reporting they had a diver onboard who thought he had missed a stop after he had lost buoyancy control and wanted medical advice. He was displaying no signs or symptoms of DCI. Medical advice from the dive doctor at Aberdeen was to not dive again that day and monitor his condition. (Coastguard report).

February 2010 10/270

Clyde Coastguard received a call requesting medical advice for a diver who had lost buoyancy and made a rapid ascent. She was displaying no signs or symptoms of DCI and the boat had sufficient oxygen. The dive doctor at Aberdeen advised that she should be brought ashore and transferred to hospital to be monitored on oxygen for few hours. (Coastguard report).

April 2010 10/105

A diver ran out of air at a depth of 23m after a 27 min dive. His buddy provided an alternate source but they made a fast ascent to the surface after panic set in.

April 2010 10/227

Two divers had completed a dive on a wreck at a maximum depth of 18m. One diver deployed a delayed SMB from 18m and whilst he was doing so the other diver attempted to clear his mask which had been leaking. The mask strap came away and the mask fell to the seabed. The other diver recovered it and held it to the diver's face for him to clear but the diver

panicked and made a rapid ascent to the surface. His buddy followed him to the surface. Both were picked up by boat and the diver who had lost his mask was put on oxygen as a precaution and monitored for 24 hours but he showed no signs or symptoms of DCI.

April 2010 10/228

A diver was on her first dive in a drysuit and first in the UK. Visibility was poor and at the end of a dive to a maximum depth of 12m when the instructor signalled to start ascending the diver inflated her suit. She started finning up but lost control of her buoyancy. Total dive time was 15 min. The instructor lost sight of the diver and made a controlled ascent to the surface. The diver was recovered and oxygen administered as a precaution although no signs or symptoms of DCI were present.

April 2010 10/106

A diver suffered from bad suit squeeze that in turn caused the diver to panic and resulted in a fast ascent.

April 2010 10/107

A diver had conducted a dive to a maximum depth of 22m. Towards the end of the dive at a depth of 12m the diver had difficulty getting air out of her drysuit and made a fast ascent to the surface. The diver was given 100% oxygen.

April 2010 10/108

A diver had conducted a dive to a maximum depth of 28m and was at a depth of 22m when he experienced a regulator free flow. The diver made a fast ascent with a maximum dive time of 10 min.

April 2010 10/143

A student was on his second open water training dive. On his previous dive he had not been comfortable with a standard weightbelt as it had kept slipping. He had borrowed a harness weightbelt which was checked as part of the buddy check. The student and instructor conducted all training exercises and then went on an exploratory dive. The student suddenly lost buoyancy and although the instructor grabbed him both made a rapid ascent to the surface from a depth of 8m. The dive was aborted at that point. Total dive time was 13 min. Once on shore it was discovered that a weight pouch had come out of the harness. The pouch could not be relocated. No ill effects were experienced by either diver.

April 2010 10/274

Clyde Coastguard received a second call in a day from a dive boat with another diver onboard who had made a rapid ascent. Again, the diver was not displaying any signs or symptoms of DCI and was placed on oxygen as a precaution. Medical advice from a doctor at Aberdeen Royal Infirmary was that as she had no signs or symptoms she should be taken to A&E at Aberdeen Royal Infirmary. The dive boat was met by an ambulance on return and the diver was transferred to hospital for assessment and treatment. (Coastguard report).

April 2010 10/273

Clyde Coastguard received a call from a dive boat reporting a diver onboard who had made a rapid ascent, but was not displaying any signs or symptoms of DCI and he was placed on oxygen as a precaution. Medical advice from the dive doctor at Aberdeen Royal Infirmary was that, as he had no signs or symptoms, he should be taken to A&E at Inverclyde Royal Hospital. The dive boat was met by an ambulance on return and the diver was transferred to hospital for assessment. (Coastguard report).

April 2010 10/110

After a break from diving a diver swam out on the surface with two buddies to a buoy marking a wreck. During the descent down the shotline the diver became disorientated. On reaching the bottom at a depth of 22m the diver felt uncomfortable and started to panic. The diver made a fast ascent to the surface and was recovered from the water into a rescue boat.

April 2010 10/104

An instructor and two students, accompanied by a sports diver, were practicing mask clearing on a 6m platform. The students had successfully cleared partially flooded masks with no problems. One student in attempting to clear a fully flooded mask inhaled water and panicked. The student made a rapid ascent to the surface. The instructor attempted to slow the ascent but his mask was displaced by the student. On the surface the student and instructor were made positively buoyant using their BCDs. The student was unharmed and calmed down after reaching the surface. The student and instructor descended again and completed training without further problems.

April 2010 10/092

Two students and an instructor were on a training dive to a maximum depth of 8m. After completing training exercises the group went on an exploratory dive. After a period of time one of the students showed the instructor her gauge which showed 40 bar. The group swam to shallower water and the instructor then offered the student his alternate source. The student took in water when switching to the alternate source and the group ascended to the surface quickly. On the surface the student was coughing and slightly breathless but otherwise alright. The second student was asked to tow her back to shore.

May 2010 10/112

A pair of divers were at 22m 8 min into a dive when one of them had a regulator free flow. The diver panicked and made a fast ascent to the surface. Both divers recovered after relaxing on the surface for a short time.

May 2010 10/285

Brixham Coastguard received a call from a dive boat reporting they had a diver onboard who had suffered a rapid ascent, but was experiencing no signs or symptoms of DCI. The boat was offered medical advice from a dive doctor which they declined as the diver was displaying no signs or symptoms. The hyperbaric chamber were made aware of the situation. The diver was placed on oxygen and his condition monitored. The boat was informed to call back for assistance if anything changed. (Coastguard report).

May 2010 10/097

A diver broke a fin strap whilst kitting up and was a little flustered before entering the water for his first dive of the year. He and his buddy entered the water and swam to the shotline. The diver had to duck dive and swim down the line, which was a usual practice due to air being slow to vent from his drysuit. During the dive he felt light and tried to find heavy objects to increase his weight but did not find any. At the end of a dive to a maximum depth of 23m the pair deployed their delayed SMB but had problems doing so. The buoyant diver began to ascend and was unable to return to the bottom. He suffered an uncontrolled and rapid ascent from a depth of 14m to the surface with a total dive time of 35 min. His dive computer recorded a rapid ascent and a missed safety stop but did not indicate an error. The diver was monitored and no symptoms of DCI appeared.

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May 2010 10/096

A pair of divers conducted a dive to a maximum depth of 39m. At the start of the ascent the first diver's dive computer indicated that a minimum of a 1 min stop at 3m was required. The lead diver signalled for a 1 minute stop at 9m to be conducted during the ascent and this stop was completed. The pair then ascended to 6m and the lead diver signalled for a 9 minute stop at that level. After struggling to hold this stop for more than 1 min the first diver signalled for the lead diver to put up a delayed SMB. During deployment the pair descended to 8m and then returned to 6m but the first diver was still struggling to hold the stop. Her computer was now showing 2 min of required stops at 3m. The diver ascended to the surface at increasing speed despite attempting to dump air. The diver was picked up by boat and placed on 100% oxygen. Her dive computer indicated 5 min of missed stops at 3m. The diver was checked and monitored for the next 24 hours. No symptoms were evident. Cause ascribed to incorrect weighting using new drysuit.

May 2010 10/100

During a dive to a maximum depth of 20m a diver became buoyant and made an uncontrolled rapid ascent from 9m to the surface. Total dive time was 20 min. No ill effects reported.

May 2010 10/144

Two divers went on a wreck dive with a planned maximum dive time of 45 min. The divers conducted a dive to a maximum depth of 34m and started to deploy a delayed SMB around 29 min as planned. During the ascent one diver had difficulty releasing air from both his drysuit and his BCD. He had previously only used his drysuit for buoyancy. The diver made a rapid ascent direct to the surface and missed all required decompression stops. On the surface he was seen to be surrounded by a tangle of his delayed SMB line. He reeled in the line and the cover boat approached. He then indicated that he had missed decompression stops and was going to descend to complete them. However, the dive manager insisted that he be recovered into the boat and the Coastguard was called. The diver was recovered and placed on 100% oxygen and checked for signs and symptoms of DCI with none apparent. The Coastguard contacted a diving doctor for advice who advised that, as long as the diver remained symptom-free, they could wait for his buddy to surface. The buddy surfaced after completing approximately 15 min mandatory decompression stops at 6m but omitting any safety stops. The boat then returned to shore and the diver was transferred to A&E by ambulance. The diver received several tests and remained on oxygen for more than 6 hours without symptoms appearing and was subsequently discharged.

May 2010 10/293

Shetland Coastguard received a call from a dive boat reporting they had two divers onboard who had made a rapid ascent from a shallow depth, but were not displaying any signs or symptoms of DCI. They were placed on 100% oxygen as a precaution. Kirkwall ALB proceeded to intercept the boat and, on arrival, found there were actually three divers. The lifeboat escorted the boat back to shore where they were met by Kirkwall CRT and ambulances to be transferred to the hyperbaric chamber for assessment. None of them needed treatment in the chamber. (Coastguard & RNLI reports).

May 2010 10/114

Solent Coastguard received a call from a dive boat reporting a diver who had made a rapid ascent from 30m and missed decompression stops. Medical advice from a dive doctor was that as the diver was not showing any signs or symptoms of DCI, he should be evacuated as soon as possible to St Richards hospital for assessment. Rescue helicopter R104 was tasked to evacuate the diver and transfer. Selsey CRT assisted at the HLS and Lymington CRT met the dive boat on return. (Coastguard report).

May 2010 10/294

Humber Coastguard received a call from a dive boat reporting a diver onboard who had made a rapid ascent. Rescue helicopter R-131 was tasked to evacuate the diver and their buddy, and the ILB from Seahouses was sent to the scene to assist with the transfer. The helicopter was met at the HLS by Hull CRT and the diver and buddy were transferred to Hull hyperbaric chamber for treatment. (Coastguard & RNLI reports).

May 2010 10/301

Dive boat reported a diver had made a rapid ascent and may need medical assistance. Connected through to duty doctor at DDRC who said diver should be alright on oxygen unless symptoms occurred later. No further action required. (Coastguard report).

June 2010 10/120

A diver and his buddy conducted a wreck dive to 29m for a total duration of 41 min. At the end of the dive the diver made a rapid ascent from 25m to the surface despite doing everything he could to try and control it. Onboard the charter boat the Coastguard was called who then tasked a Coastguard helicopter and the diver and his buddy were airlifted to a recompression facility. This was the first dive since the diver had changed to a 15 litre cylinder and although he had adjusted his weights it may not have been sufficient.

June 2010 10/124

Three divers conducted a dive on an underwater pinnacle and reached a maximum depth of 23m. Towards the end of the dive the trio ascended onto a plateau at the top of the pinnacle and set off in the direction of the shotline. Unnoticed by the other two, one of the divers started to feel herself rising up. She tried to dump air from her drysuit auto dump and also tried pressing the valve to manually dump air but was still ascending. The diver started to slow down as she approached 6m and thought she had managed to stop at 5m but was still gently rising and could not complete a safety stop and surfaced. Total ascent time was 1 min. The diver was recovered to the boat and made to lie down and given 100% oxygen. The other two divers noticed she was missing and returned to where they had last seen her, checked the drop off for signs of bubbles and then deployed a delayed SMB and ascended to the surface. On surfacing they were relieved to see the other diver already in the RHIB. The Coastguard was contacted requesting a link call with a diving doctor. The doctor advised that the diver should remain on oxygen and be monitored for symptoms. After 1 hour on 100% oxygen, without any signs or symptoms of DCI, the doctor advised that it was all right for her to return home without further assessment or recompression treatment. No adverse effects were experienced.

June 2010 10/313

Shetland Coastguard was informed of a diving casualty, 53 male, rapid ascent from 30-35m no signs of DCI, casualty was walking up jetty to ambulance. Stromness Coastguard assisted, problems with reception with radio at Houghton, tried in several places including at top of the hill but couldn’t get through. Casualty taken to Houghton, placed on oxygen. (Coastguard report).

June 2010 10/314

Shetland Coastguard was alerted to a diver having made a rapid ascent from 8m, the vessel was met by an ambulance and the casualty taken to Balfor hospital as a precaution. (Coastguard report).

June 2010 10/129

A pair of divers planned to dive to a maximum depth of 35m. Approximately 7 min into the dive at a depth of 29m one of the divers experienced a free flow. He could not read his computer or cylinder pressure gauge due to the bubbles. He took his buddy's octopus and threw his regulator over his right shoulder so that he could read his gauges. His buddy turned off his cylinder to prevent further gas loss. The diver signalled to ascend but without an air supply for buoyancy the first attempt to start the ascent failed. On the second attempt the diver finned as well as using his buddy's buoyancy and the divers ascended from 25m to the surface without a safety stop. On the surface the diver inflated his BCD orally and from his BCD emergency cylinder and the pair swam to the shore and exited the water. Total dive time was 13 min. The diver was monitored for signs and symptoms of DCI for 1 hour but no ill effects were noted.

June 2010 10/245

A diver experienced a free flow at a depth of 18m. His buddy provided an alternate source and they ascended to 12m where their gas pressure was down to 30 bar and the divers made a fast direct ascent to the surface. Oxygen was administered as a precaution for 10 min. No signs or symptoms of DCI seen.

June 2010 10/132

A diver forgot to fit his weightbelt. After completing a dive to a maximum depth of 31m the diver reported being very light at 15m and then could not hold his stops at 10m. The diver surfaced missing 10 min of stops. Total dive time was 60 min. The diver did not display any symptoms of DCI but after receiving advice from a diving doctor via the Coastguard the charter boat returned to shore and the diver was taken by ambulance to a recompression chamber for further examination. (Coastguard report).

June 2010 10/135

Three divers planned a dive to 30m involving a maximum of 10 min of stops. The divers started their ascent up the shotline after 25 min with 6 min of stops showing. At 15m one of the divers wanted to practise mid-water delayed SMB deployment which was completed without incident. One of the other divers then let go of the shotline to join the other two, lost buoyancy control and went directly to the surface omitting 2 min of required decompression stops. He was recovered into the boat and placed on 100% oxygen for approximately 20 min. No signs or symptoms of DCI occurred. The diver did not dive again that day or the next day. The other two divers completed their stops and ascended normally. On surfacing the diver had found his BCD to be half full when he had expected it to have been empty. On examination the diver's BCD was found to have a slow leak from the inflator valve.

June 2010 10/209

Two divers were ascending under a delayed SMB from a dive to a maximum depth of 28m for a total of 33 min. As they reached a depth of 10m a diving charter boat reversed over their delayed SMB whilst trying to avoid a fixed shotline causing them to have a brief fast ascent to 4m before descending again. The line became tangled with the boat and although the skipper was alerted he did nothing to untangle it and some of his passengers eventually released the line. The divers completed safety stops at 3m with no further problems.

June 2010 10/326

Clyde Coastguard was contacted by a dive support vessel reporting having a diver aboard having made a rapid ascent from 15m following a dive to 27m. A medical connect call was established between the Coastguard the vessel and the hyperbaric chamber at Millport, the doctor advised the diver should be brought to the chamber to be checked over, the diver had previously had a PFO resolved. The casualty was transferred to Largs lifeboat and taken to shore for onward transportation to the chamber, the diver was kept under observation for 24 hours. (Coastguard & RNLI reports).

July 2010 10/159

A diver and his buddy conducted a dive to a maximum depth of 27m for a total of 46 min. During the ascent from the bottom the divers' delayed SMB line became snagged at 20m which took time to rectify. The pair then ascended to a 6m safety stop for 2 min. During the final 4m the diver lost control of his buoyancy and ascended faster than normal. On the surface both divers responded with 'OK' signals but on coming alongside the boat one of the divers' computers was sounding an alarm. Once onboard, in response to questioning about the alarm, the diver reported missing 14 min of decompression stops. The diver was placed on 100% oxygen but there were no symptoms of DCI. On reaching shore the diver reported some numbness in his right hand but explained this was normal for him after gripping an object like the oxygen mask for an extended period. The diver was taken to a recompression facility and received a precautionary 2 hour 20 min recompression treatment.

July 2010 10/157

Yarmouth Coastguard received a call from a dive vessel reporting that they had a diver aboard who had missed several minutes of decompression stops. Yarmouth Coastguard tasked Happisburg lifeboat and rescue helicopter R-125 to recover the diver and transfer him to James Padget hospital, the patient was later discharged requiring no treatment. (Coastguard & RNLI reports).

July 2010 10/334

Solent Coastguard was informed by Dover Coastguard of a diver in Solent SRR having made a rapid ascent whilst on a dive. No further SAR action taken, casualty kept under observation. (Coastguard report).

July 2010 10/332

Forth Coastguard received a call from a skipper of a dive RHIB reporting that he had a diver that had missed decompression stops after a 45m dive. There was a one other diver in the water. The RHIB was 3/4 of a mile NE of the Bass Rock. Dunbar lifeboat was tasked and a request was made for a helicopter. A call was made to the dive doctor in Aberdeen. It was established the diver had suffered a panic attack and was showing no signs of a DCI, North Berwick and Dunbar lifeboats also attended. All units stood down, operations terminated. (Coastguard & RNLI reports).

July 2010 10/229

Two divers were on a reef dive as part of a week long diving trip. One of the divers was fairly new to drysuit diving. After a dive to a maximum depth of 30m the divers were at a depth of 23m and just going into decompression stops when they found themselves swimming against a current. The diver lost control of his buoyancy which led to a fast ascent from around 20m. The diver's computer locked out. His buddy made a controlled

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ascent to the surface. Total dive time was 30 min. The diver experienced no symptoms of DCI but was given oxygen as a precaution and he did not dive for 48 hours.

July 2010 10/247

Following a dive to 37m a diver experienced a first stage regulator failure at 28m whilst completing a deep stop. The diver ascended to the surface without completing any further stops. The diver showed no signs of DCI but was given oxygen and advised to attend A&E for assessment.

July 2010 10/173

A diver conducted two dives in a day with a 1 hour surface interval between dives. Dive 1 20m for 30 min including a 3 min safety stop at 3m. Dive 2 20m for a total time of 17 min. At the end of this second dive the diver lost control of his buoyancy at a depth of 20m and had an uncontrolled ascent to the surface missing a 3 min safety stop at 6m. The diver swam to the shore on the surface and was given oxygen for 30 min. A recompression chamber was contacted for advice and they advised that there should be no problem but if any symptoms of DCI were to occur the diver should go straight to them for treatment. No ill effects were experienced.

July 2010 10/338

Clyde Coastguard was contacted by a dive support vessel requesting medical advice for two divers who had made a rapid ascent following a dive to 25m, the advice was to evacuated the divers, both taken to Dunstaffnage initially and one on to Lorne & Isle Hospital Oban. (Coastguard report).

July 2010 10/175

Shortly after arriving at 17m at the start of a dive one diver experienced a painful cramp in her leg. The pain caused her to panic and start to ascend. Her buddy took hold of her BCD and tried to control the ascent. Efforts to control the ascent had no effect and the speed of ascent increased rapidly. The buddy let go at 5m and controlled his own buoyancy making a normal ascent to the surface. The buoyant diver surfaced very fast but was conscious and talking to those in the cover boat. Total dive time was 9 min. Both divers were recovered into the boat. The diver who had made the rapid ascent was sat down and assessed. She vomited once and requested to be taken back to shore but this was refused. Both divers were placed on oxygen, given fluids and closely monitored. Medical advice was sought and they were advised that no further treatment was necessary. The pair were monitored for a further hour and advised to seek help immediately if symptoms appeared. No ill effects were reported by either diver.

July 2010 10/239

A diver on a previous dive had been heavy and so removed 2kg of weight. She conducted a wreck dive with two other divers to a maximum depth of 38m and a bottom time of 15 min and had an indicated 15 min of decompression stops. The shotline had come loose from the wreck and so the divers ascended on a delayed SMB but the diver was unable to stop at 6m and ascended direct to the surface missing decompression stops. Her buddies completed their decompression stops and surfaced normally. The diver was recovered to the RHIB and although feeling normal was placed on 100% oxygen and the Coastguard contacted for advice. Sea conditions were deteriorating and it was expected to take over an hour to return to shore and so a helicopter was scrambled even though the diver was not displaying symptoms. The diver was airlifted to a recompression chamber and received two precautionary recompression treatments but no symptoms of DCI occurred.

July 2010 10/347

Solent Coastguard was alerted by a dive support vessel reporting that they had a diver aboard having made a rapid ascent from 23m whilst deploying a delayed SMB the line did not reel out causing the diver to be dragged to the surface. As a precaution the diver was airlifted by Coastguard rescue helicopter R-104 to Poole HLS for onward transportation to the chamber, the helicopter was met at the HLS by Poole CRT. (Coastguard report).

July 2010 10/183

A pair of divers conducted a dive to a maximum depth of 22m for 35 min. The pair became separated and one diver deployed a delayed SMB but became tangled up with the reel. She failed to free it and was dragged to the surface in a rapid ascent and missed decompression stops. A call to the Coastguard was made and the diver airlifted to a recompression chamber. No symptoms were reported. (Coastguard report).

July 2010 10/351

Shetland Coastguard received a call informing them of a diver who had missed stops following a 35m dive for 43 min having made a stop at 20m but missed all later ones the diver was being administered 100% oxygen. The diver was met by an ambulance at Houton for transportation to Stromness chamber. (Coastguard report).

August 2010 10/357

Brixham Coastguard was contacted by a dive support vessel reporting they had a diver aboard who had made a rapid ascent from 64m, a medical link call established the diver required immediate evacuation, RN rescue helicopter R-193 airlifted the casualty direct from the craft and flew to DDRC Plymouth. The diver was semiconscious and had breathing difficulties, Plymouth CRT met the vessel on return to port. (Coastguard report).

August 2010 10/358

Holyhead Coastguard received a call from a dive support vessel reporting they had two divers aboard who had made a rapid ascent from 20m. A medi link call was established by Holyhead Coastguard with a diving specialist, rescue helicopter R-122 recovered the divers to a chamber for treatment, Hoylake Coastguard team prepared the HLS. (Coastguard report).

August 2010 10/230

Five divers were diving a wreck as a trio and a buddy pair. The trio descended the shotline with one leading due to difficulty clearing her ears. The shotline had strands protruding from it where boats had moored and the other pair in the trio had problems with entanglement in the line. The divers reached the wreck at a depth of 35m and began a circumnavigation of it. As they reached the bridge all three had approximately 120 bar remaining. One of the divers became distracted by the other pair of divers and then became concerned about his air reserves. The diver then became confused and signalled to head down and forwards believing this to be the direction to the shotline but the group ended up on the seabed at a depth of 40m. The divers tried to head back towards the wreck but could not locate it. The diver was now down to 50 bar and so he signalled for one of the others to deploy a delayed SMB as both had 90 bar remaining. A delayed SMB was deployed but the line seemed to take a long time to deploy and the diver began ascending before it had fully deployed. One of the others also started to ascend and she signalled the third diver with the reel to do the same before the line had finished deploying. The first two divers ascended to 6m to conduct a decompression stop. The third diver was unable to stop and ascended directly to the

surface with the delayed SMB reel. The other two divers continued their stop but the first diver was unable to locate his pony cylinder regulator. Both divers ran out of air after completing 14 min of 17 min required decompression stops. As the divers surfaced they saw the boat about to pick up the third diver and shouted for her to be put on oxygen. After recovery all three divers received oxygen and drank several litres of water. The Coastguard was called and, although no symptoms were being displayed, medical advice was sought and the divers were taken by helicopter to a recompression chamber. They were assessed, put on oxygen and monitored for 12 hours and released without further treatment.

August 2010 10/214

A pair of divers completed the second dive of the day to a maximum depth of 29m. The divers deployed a delayed SMB from the top of the boilers on a wreck. On deployment, the delayed SMB started to stream indicating that the tide had turned. As the divers started their ascent the diver with the reel grabbed his buddy's BCD and would not let go or wind in the reel. The second diver took the reel from him and found it difficult to use. The divers continued to rise and at 15m the second diver's computer started to sound a rapid ascent alarm. The divers continued to the surface unable to control the ascent. The second diver's computer indicated they had missed 9 min of stops. The divers were recovered into their RHIB and monitored whilst taking plenty of fluids. Oxygen was prepared but not used and no symptoms appeared. Subsequent investigation established that the delayed SMB had been drawn across the shotline and that a metal snap link at the base of the buoy had clipped onto the shotline. Dive profiles showed that the ascent was steady and at just over 10m/min.

August 2010 10/202

A diver had conducted two dives the previous day without incident. The diver and his buddy had an uneventful dive on the second day on a wreck to a maximum depth of 32m. The pair began a normal ascent but at 7m the diver lost buoyancy control and ascended to the surface with his computer indicating 7 min of missed decompression stops. He tried to descend but then surfaced again and his computer locked out. His buddy joined him a short time later having completed a safe ascent. On recovery to the boat another DCI incident (Incident 10/201) was being dealt with. The diver was asked how he was and confirmed he was alright but had a very slight pain in the chest area which he put down to strain whilst boarding the charter boat. He was placed on nitrox and laid down but showed no other symptoms. He was taken by the same helicopter as the other casualty (Incident 10/201) to a recompression chamber. He received a 4 hour treatment.

August 2010 10/371

Milford Haven Coastguard was called by a dive support vessel, reporting they had a diver aboard who had made a rapid ascent from 4m, a medical connect call was established, the duty doctor recommended the casualty be given plenty to drink and be administered oxygen and kept under observation. (Coastguard report).

August 2010 10/249

A diver experienced a faster than normal ascent from 22m and was put on oxygen for 20 min. No ill effects.

August 2010 10/377

A dive support vessel contacted Humber Coastguard requesting medical advice for a diver who had missed stops following a dive to 38m, the vessel was advised to return to port, where a waiting ambulance would take the diver to Hull hyperbaric chamber for treatment, Bridlington CRT met the vessel when it returned to port. (Coastguard report).

August 2010 10/237

At the end of a dive to a wreck at 40m a waster line was attached to the wreck, the main tie in line was removed and a lifting bag was attached to the anchor and inflated. The waster line snapped and a diver holding on to the shotline was dragged up to the surface by the lifting bag, missing decompression stops. The diver's buddy deployed a delayed SMB and made a normal ascent. The diver was recovered onto the boat and placed on 100% oxygen for 90 min. The Coastguard was contacted and a helicopter airlifted the diver to hospital where the diver was assessed. No symptoms of DCI occurred. The diver received a two and a half hour recompression treatment as a precaution and was released and advised not to dive for seven days.

September 2010 10/387

A dive vessel contacted Shetland Coastguard reporting they had a diver aboard who had made a rapid ascent following a dive to 41m, missing stops. An ambulance was requested to transport the casualty to a recompression chamber for treatment. (Coastguard report).

September 2010 10/222

A pair of divers were diving on an offshore reef. The divers slowly descended down the reef to a maximum depth of 29m. The divers then worked their way back up the reef to approximately 25m. One of the divers then experienced cramp and was clearly in difficulties but did not indicate to his buddy what the problem was. The diver held on to the reef for a few minutes and then signalled that he wanted to ascend. The other diver deployed a delayed SMB approximately 15 min into the dive. The diver started to follow the line up but was signalled to slow down as he was a little too fast but, at a depth of 18m, he lost control and started to ascend faster. In doing so he held on to the delayed SMB line and pulled the other diver up as well. The diver ascended directly to the surface. The second diver managed to control his ascent before reaching 6m and completed a 5 min safety stop and surfaced after 22 min total dive time, whilst the buoyant diver observed him from the surface. Both divers were then recovered into their boat and the first diver was given oxygen and sips of water for 15 min and was monitored. No signs or symptoms of DCI were experienced.

September 2010 10/399

Shetland Coastguard received details of a diving emergency from a dive support vessel, reporting having a diver who had made a rapid ascent from 20m, 27m dive time 25 min, missed no stops, rapid ascent, has been on oxygen since on surface, the vessel was met by Stromness CRT and an ambulance, the casualty was taken to Stromness for treatment. (Coastguard report).

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Technique Incidents

November 2009 10/037

A diver was on a training dive practicing regulator removal and replacement in cold water and poor visibility. The diver did not replace the regulator properly and so received a mouthful of water when she tried to breathe in. The diver tried to remain calm and clear the regulator but kept choking on water. The instructor took control and recovered the diver safely to the surface. No serious effects were experienced.

April 2010 10/080

A diver conducted a solo dive to a maximum depth of 6m and a duration of 56 min. He had briefed two non-diving friends ashore of his plans. On surfacing he was further east than he had intended and had a long surface swim back to shore. On returning to the location where he expected to find his friends they were not there. The friends had not seen the delayed SMB surface because it had not been deployed where expected and there were several boats moored in the bay. Believing the diver to be overdue the friends had moved along the road to try and get a mobile phone signal and called a mutual friend in Scotland who was a diver. The mutual friend alerted the Coastguard in Scotland who raised the alarm with the local Coastguard. Local Coastguard tasked local team to investigate and found all well.

May 2010 10/283

Brixham Coastguard received a call from a person on the shore reporting they had seen a diver surface, blow a whistle, raise his arms and descend again. Berry Head CRT and both Torbay lifeboats were sent to the scene to investigate. There was a boat in the area that it was ascertained was fishing, and someone waiting on the beach for a diver to return, but it was not the diver who had blown the whistle. There was a group of divers observed returning to shore and it was found to be one of these who surfaced and blew the whistle. He had agreed with his group on the shore prior to the dive that he would go out and check the tides and indicate by surfacing, blowing the whistle and making an 'OK' signal. (Coastguard & RNLI reports).

July 2010 10/340

Yarmouth Coastguard conducted an extensive communications search for a dive boat, which was 2 hours overdue from their reported return from a dive. Sheringham Coastguard searched the launch sites at Sheringham and spoke to crews of fishing boats. Local dive clubs contacted. Someone from the dive boat eventually called up reporting they were ashore and apologising for forgetting to notify the Coastguard they were ashore. (Coastguard report).

August 2010 10/356

Yarmouth Coastguard. Three divers went into the water without an SMB, advised by lifeguard that it is unsafe in this area. Divers were 100 yds offshore. Hopefully this will not turn into an incident but the behaviour of these people is reckless in the extreme and it is worth recording that they have been advised of their foolishness and have chosen to ignore the advice. Should anything to happen to them we will at least know the background. The lifeguards are going to keep a watch but there is no further action I can undertake at this time. (Coastguard report).

August 2010 10/196

A group of four divers conducted a dive to a maximum depth of 10m. One of the divers was wearing a twin-set with an isolation manifold. Towards the end of the dive the diver began to experience difficulty breathing from his regulator. In checking his contents gauges he realised that one cylinder was empty and the other was completely full and that he had conducted the dive with the manifold closed. Because of the multiple options of regulators available the diver took the octopus of one of the other divers before opening the isolation valve and then switching back to his main regulator. No ill effects were experienced.

August 2010 10/365

Portland Coastguard was alerted by an RYA support vessel of an unattended RHIB flying a diving flag 100m off the Nothe Fort, Weymouth. While Weymouth RNLI beach lifeguards proceeded to investigate a snorkeler returned to the RHIB. (Coastguard report).

August 2010 10/199

Two pairs of divers were to dive from a boat. After the first pair of divers had entered the water the second pair began kitting up. One of the divers discovered that his side slung decompression cylinder containing nitrox 80 was missing and a similar cylinder containing air remained in the boat. This meant that one of the first pair of divers had unknowingly taken the decompression mix on a dive to 33m. The dive manager deployed a thunderflash to recall the divers. The first pair surfaced having reached a maximum depth of 25m. The divers were recovered to the boat and the incorrect cylinder identified. The diver confirmed that he had not breathed from it.

Equipment Incidents

January 2010 10/058
A diver experienced a regulator free flow at 20m 10 min into a dive.

February 2010 10/059
A diver experienced a free flow at 21m 23 min into a dive. On switching to his buddy's alternate source he could not get a breath initially due to a flow stop device being in the 'Off' position.

February 2010 10/055
After nearly 29 min on a dive to a maximum depth of 20m a diver found that, when he tried to inhale, no air was available. The diver quickly realised that the mouthpiece had separated from the body of the regulator second stage, leaving the diver with just the mouthpiece in his mouth. The diver did not breathe in any water. He swapped to his own alternate source and surfaced safely.

April 2010 10/090
Two divers conducted a dive on a wreck at an inland site to a maximum depth of 22m. Some time into the dive the pair found a shot weightbelt approximately 20m from the wreck and one diver sent this up to the surface using his delayed SMB for later collection. The second diver then deployed his delayed SMB. During this deployment, at a depth of 14m, the second diver's octopus started to free flow. Efforts to stop this free flow by both divers failed and so the first diver donated a gas source and switched to his own backup. During the ascent to the surface the free flowing regulator emptied the cylinder. On the surface the divers recovered the delayed SMB and weightbelt and returned to shore.

May 2010 10/099
An instructor and student conducted a closed circuit rebreather training dive to a maximum depth of 15m. The student was conducting a drill to correct a high oxygen partial pressure situation. The student bailed out to open circuit and conducted all required actions including isolation of the oxygen cylinder. On reopening the oxygen cylinder the PO2 was seen to rise significantly to a level in excess of 2 bar. The student remained off the loop and repeated the drill with the PO2 again rising to high levels. The student then surfaced on open circuit with the instructor. On the surface the pair were able to return to normal operation and conduct the remainder of training on a 6m platform. This was the same pair of divers and problem as encountered in incident 10/126.

May 2010 10/126
An instructor and student conducted a CCR training dive to a maximum depth of 20m. The student was conducting a drill to correct a high oxygen partial pressure. The student bailed out to open circuit and conducted all required actions including isolation of the oxygen cylinder. On reopening the oxygen cylinder the PO2 was seen to rise significantly to a level in excess of 2 bar. The student remained off the loop and repeated the drill with the PO2 again rising to high levels. The student then surfaced on open circuit with the instructor. On the surface the pair were able to return to normal operation and conduct the remainder of training at 15m monitoring the PO2 readings with no further problems. This was the same pair of divers and problem as encountered in incident 10/099.

May 2010 10/098
An instructor and two students were practicing alternate source drills on a dive to a maximum depth of 14m. Visibility was poor and made worse by disturbed silt from the bottom. After a couple of partial ascents the students swapped roles and as one donated her alternate source to the other the second student's primary regulator started to free flow. The instructor attempted to stop the free flow but could not stop it. He then went to turn off the cylinder but this did not stop the flow either and the instructor realised that he had turned off the first student's cylinder by mistake. He turned this cylinder back on and neither student noticed. He then isolated the second student's cylinder and this stopped the flow of gas. He switched the cylinder back on again and the regulator was working but there was only 10 bar of gas remaining. The instructor then donated his alternate gas source to the second student and all three ascended to the surface where the student who was out of gas returned to the boat and the instructor and the other student descended and completed training. No ill effects were experienced.

May 2010 10/242
A diver experienced a free flow during a dive to 26m for a total of 18 min and made a normal ascent but omitted a safety stop on the way up. The divers used their own oxygen as a precaution.

May 2010 10/243
A diver experienced a free flow at 34m and ascended. Total dive time was 19 min. He was placed on oxygen for 5 min as a precaution.

June 2010 10/131
An instructor was conducting a dive-leading demonstration dive for two student divers on a wreck. During the dive the instructor saw a weight pouch fall from one of the other divers' BCDs. The pouch landed on the deck of the wreck; it was recovered and replaced securely. The pouch was only around 2kg and so it was considered unlikely to have caused the mechanism to release; hence it was assumed that the pouch had not been fully secured at the start of the dive. The dive was completed without further incident.

August 2010 10/208
A recently qualified diver entered the water with an instructor for her first dive in the UK at an inland site. At a depth of 4m the BCD inflator hose became detached. The pair ascended and the diver was made buoyant and both returned to shore. The diver was treated for shock. Inspection of the equipment found a fault with the inflator hose and it was replaced. The dive centre suggested the use of the on site swimming pool to undertake an equipment and buoyancy check, which was undertaken. 3 hours later the pair completed a dive to 10m for 25 min without further problems.

September 2010 10/221
Two divers undertook a wreck dive using closed circuit rebreathers and using DPVs. The divers descended the shotline and found poor underwater conditions not suited to DPV use but because one diver was trying his with a view to buying one he continued with the dive. Approximately 17 min into the dive the diver realised that in his excitement to try the DPV he had not switched his rebreather to the high set point,

which he then did. 1 min later the diver found the PO2 reading to be 2.5 bar, the maximum the cells could report. All cells reported this consistently and the unit alarms and head-up display were signalling the high level. The diver conducted a diluent flush but the levels did not change. The diver went to the seabed at 47m and again conducted a diluent flush, again without a change of reading. The diver turned off his oxygen supply and continued to flush and achieved a reduction on PO2. On turning the oxygen cylinder back on the levels rose again to unacceptable levels. The diver then bailed out using the integrated bailout valve and settled himself. It took some time to prepare to switch to his off-board bailout gas as the diver used a gag strap but, having switched, the pair of divers made their way to the top of the wreck and the buddy deployed a delayed SMB, whilst the diver switched his computer to open circuit. The divers began their ascent and the diver switched to his off-board decompression gas of nitrox 50 at a depth of 21m. The divers conducted decompression stops starting at a depth of 24m. Whilst at the 6m stop the diver checked his closed circuit rebreather handsets and found they were reading 0.7 bar. He switched on the oxygen cylinder and found the unit maintained a stable reading and so he went back on the loop to utilise the higher PO2 for the remaining decompression stops. The divers moved up to a 3m stop and after 1 min at this stop the unit again started adding excess oxygen which resulted in the diver being unable to maintain depth and he slowly rose to the surface missing 11 min of decompression stops at 3m. His buddy followed him up and missed 18 min of indicated stops. Both divers were recovered from the water and breathed high PO2 from their rebreathers and took a large amount of fluids. No symptoms of DCI were noticed. Investigation of the equipment revealed a corroded solenoid. The diver attributes this to leaving the unit packed away for three months following an overseas trip.

September 2010 10/231

Two divers were conducting their third dive of the day after a 4 hour surface interval. Previous dives were 24m for 36 min and 24m for 34 min. Towards the end of a dive to a maximum depth of 11m in thick kelp the divers agreed to start their ascent. As one diver started his ascent his computer indicated he was going up too fast and so he pulled his dump valve and the valve came away from the jacket, although the diver was not aware of the cause at the time. His buddy had looked away briefly at this time and only witnessed a mass of bubble above him. The buddy surfaced to find the diver unable to stay on the surface. The diver signalled for his buddy's octopus believing that he had no air. In his panic the diver grabbed his buddy knocking his regulator out and pushing him under the water. The buddy replaced his regulator, pushed the diver away and took hold of him from the side. He was unable to support both of them on his own BCD and so released his own weightbelt, instructed the diver to do the same and then signalled to the shore for help. The divers were now outside the kelp line and were drifting in the current and so the buddy towed the diver towards a buoy and they awaited for a boat from shore to recover them.

Miscellaneous Incidents

October 2009 10/256
Solent Coastguard received a call from Newhaven National Coastwatch Institute (NCI) reporting they had seen divers enter the water approx 1 hour previously but had not seen them surface and leave the water. However, shortly after calling the NCI called back to advise that they had seen the divers leave the water. (Coastguard & RNLI reports).

November 2009 10/030
Following reports of divers in difficulty an RNLI lifeboat was called out but, before the crew had assembled, a local fishing boat had already assisted the diver who was in difficulty to the shore.

February 2010 10/265
Brixham Coastguard received a call from a person on the shore reporting they could see two divers they thought could be in difficulty as they seemed to be drifting further out to sea. Berry Head CRT were tasked to proceed to the scene to investigate. On route to the scene they spoke to the informant who advised that the divers had surfaced and as the CRT arrived the divers were just exiting the water unaided. The CRT spoke to the divers who confirmed that they were alright and had not been in any trouble. FAWGI. (Coastguard report).

February 2010 10/267
Forth Coastguard received a call from a concerned lady reporting that her partner was several hours overdue returning from a dive with his buddies. However, as information was being gathered and SAR operations commenced the lady reported that her partner had been in contact and was safe and well. (Coastguard report).

April 2010 10/409
Lifeboat launched to assist diver. False alarm. (RNLI report).

April 2010 10/277
Forth Coastguard received a call from someone onshore that they could see two divers in difficulty. The ALB & ILB from Broughty Ferry, St Andrews CRT, and RN rescue helicopter R-177 were tasked to proceed to the scene. On arrival, the CRT assisted the divers from the water. The divers confirmed they were not in any difficulty, that they had been swimming back in slowly against the wind, and that the situation had been misread by the person who called. (Coastguard & RNLI reports).

April 2010 10/278
Clyde Coastguard received a 999 call from a lady reporting that her husband was overdue returning from a shore dive. During the call the man called his wife to report he was out of the water and safe. (Coastguard report).

June 2010 10/305
MRCC Swansea located the owner of a diver's surface marker which was found in the water off Worms Head by Gower Explorer. (Coastguard report).

June 2010 10/308
Stornoway Coastguard received a 999 call reporting an overdue diver, Stornoway Coastguard tasked Coastguard rescue helicopter R-100 and Stornoway lifeboat, the casualty was located safe and well before the units arrived on scene. FAWGI. (Coastguard & RNLI reports).

June 2010 10/310
Swanage Coastguard rescue officers, while on patrol, were informed by a member of public that she was with a group of five divers who had gone in off Swanage Pier. She was concerned because she had not expected them to be in so long. The Coastguards found the group and all were well. (Coastguard report).

June 2010 10/321
Aberdeen Coastguard received a call of a diver who was overdue following a shore dive in the Ullapool area. Possibly false alarm with good intent. No further information. (Coastguard report).

June 2010 10/325
Yarmouth Coastguard was alerted to the possibility of an overdue dive boat, the dive boat was supposed to be back into Lowestoft at 18:30, the vessel turned up in Lowestoft Harbour safe and well. False alert. (Coastguard report).

July 2010 10/330
Humber Coastguard was alerted by a Coastwatch lookout of a dive boat looking for a diver, Redcar lifeboat proceeded, when alongside the dive boat it was concluded to be a false alert good intent. (Coastguard & RNLI reports).

July 2010 10/342
Forth Coastguard tasked Anstruther lifeboat to investigate the report of a delayed SMB with no boat present in the area. On arrival the lifeboat made contact with the divers, apparently the divers heard a boat above them and deployed the delayed SMB to warn off the vessels, their own boat had run aground. Conclusion false alert good intent. (Coastguard report).

July 2010 10/352
Clyde Coastguard received a 'Mayday' call from a dive support vessel, believing that they had a diver in difficulty underwater. The divers surfaced safe and well, the incident was closed as false alert good intent. (Coastguard report).

August 2010 10/420
Two lifeboats launched to assist dive boat. False alarm. (RNLI report).

August 2010 10/361
Portland Coastguard tasked Poole lifeboat to investigate a report of a person in difficulties on the Studland side of the Training Bank at Poole Harbour entrance. It turned out to be a diver being recovered by a RHIB. (Coastguard & RNLI reports).

August 2010 10/362
Falmouth Coastguard received a call from a police officer reporting a diver that he believed to be overdue at Pendennis Point. Prior to the arrival of Falmouth Coastguard team the diver was located safe and well on the beach. (Coastguard report).

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August 2010 10/369

Humber Coastguard tasked Seahouses lifeboat to investigate a sighting of a diver's marker buoy at the Longstone Island. The buoy was recovered and taken back to Seahouses. Nothing suspicious or untoward found. (Coastguard report).

August 2010 10/376

Holyhead Coastguard were alerted to two missing divers, both turned up safe and well, false alert good intention. (Coastguard report).

August 2010 10/379

Yarmouth Coastguard was informed of a trailer on beach, the first informant stated slack water is now so dive boat should be back. The dive RHIB returned safely shortly after. False alarm good intent. (Coastguard report).

August 2010 10/380

Yarmouth Coastguard was informed of an overdue dive boat, it had not returned to shore at the expected ETA, Yarmouth Coastguard put out a call for the vessel which was not acknowledged, the vessel shortly afterwards returned to shore and had not heard the Coastguard broadcast, the vessel was safe and well. False alert good intent. (Coastguard report).

August 2010 10/382

Portland Coastguard was alerted by a vessel expressing concern for a diver who had been in the water for nearly 2 hours in Mupe Bay. Advice was sought from experts and it was believed that he was using a rebreather which proved to be the case as he surfaced shortly afterwards. False alarm good intent. (Coastguard report).

September 2010 10/386

Portland Coastguard was made aware of an overdue vessel in the Portland area. Investigations were made and broadcast action taken on VHF CH16. The vessel owners were eventually contacted and it was established that all was well. (Coastguard report).

September 2010 10/425

Two lifeboats launched to locate missing diver(s). False alarm. (RNLI report).

September 2010 10/396

Shetland Coastguard investigated the report of a surface marker buoy adrift in Scapa Flow, Shetland tasked Long Hope lifeboat and St Margaret’s Hope Coastguard team to investigate, the lifeboat recovered the SMB and reel, which was concluded, had been lost. (Coastguard report).

Overseas Incidents

Fatalities

June 2010 10/128

A diver conducted a dive to a maximum depth of 29m. During the dive he lost consciousness and was recovered to the surface by a controlled buoyant lift. The diver failed to survive. The cause of death was determined to be drowning. The diver had previously had heart surgery but had been passed fit to dive.

Decompression Illness

October 2009 10/210

The day after two days diving a diver experienced symptoms of DCI and received recompression treatment. The first day had included two very shallow dives to less than 5m and a full day teaching on the beach. On the second day two dives to 14m and 12m were completed for 57 min and 30 min respectively. On the evening of the second day the diver reported some discomfort but went to bed assuming it was a strain or similar. He awoke the next morning with severe pain in both elbows and initially put this down to a joint problem and not DCI. However the pain increased and so the diver contacted a diving colleague who assessed the diver at his home, applied oxygen and arranged for transport to a recompression chamber where he received two treatments.

September 2010 10/220

A diver had conducted a dive to 51m using trimix 21/35 for a bottom time of 35 min. He used nitrox 50 for decompression on the ascent. On arrival at a 9m decompression stop the diver experienced pain in his right elbow. The pain eased at the 6m stop but became more severe at the 3m stop and excruciating on surfacing. Total dive time including stops was 90 min. The dive boat made an emergency call to the Coastguard and although in the French sector of the channel UK Coastguard assumed control. A helicopter was tasked and airlifted the diver to a recompression chamber for treatment. (Coastguard report).

September 2010 10/240

On the fifth day of a diving holiday a diver conducted the first dive of the day on a wreck to 35m for 44 min including required and safety stops. 2 hours 30 min later he conducted a second dive from the shore to 35m for 44 min including required decompression and safety stops. Within 1 min of exiting the water from the second dive the diver was staggering and looked pale. He was de-kitted and laid down. The diver complained of feeling weak with pains in his right leg and back; he had shallow breathing and felt very cold. The diver was given oxygen from the remaining gas from a rebreather 2 ltr cylinder. A local recompression chamber was called but there was no response and so a call was made for an ambulance. A local instructor was passing and provided use of his oxygen kit during which a rash developed on the diver's stomach but the right leg improved and his breathing became easier. The diver was taken to hospital by ambulance and was on oxygen and a saline drip. A chest x-ray indicated lung barotrauma. A hyperbaric unit doctor indicated that the diver had only a 'skin DCI' and would only require a 2 hour treatment in a recompression chamber and would be alright to fly home in two days time. After recompression treatment the diver still complained of 'pins and needles' and weakness in his legs, he had low blood pressure and was feeling dehydrated. He was kept overnight in hospital and then given a further short treatment. He was informed he had suffered a spinal DCI which had come on during the night and he was kept in hospital for four days with further recompression treatments. The diver was then returned to the UK by air ambulance and received a further forty hours recompression treatment over the next ten days before being released. The diver continues to make slow progress towards a full recovery. The diver has since been found to have a PFO and is considering having it repaired.

September 2010 10/232

A diver conducted a series of dives over four days, Two dives a day for the first three days and three dives on the final day. 90 min after the last dive she felt that the skin on the shoulder was hot and sore. A red patch appeared on her skin. A skin DCI was diagnosed and oxygen and fluids were administered. After 40 min all signs and symptoms had disappeared. The diver refrained from diving for the rest of the holiday.

Illness / Injury

October 2009 10/024

A diver on holiday joined a dive with a local dive centre to dive a wreck in 27-30m and a scenic swim afterwards in the cove looking at marine life. This was deeper than the diver's previous experience (23m), but he felt comfortable on the top of the wreck at 27m and subsequently dropped to a maximum of 30m. The dive briefing had been to return to the surface with 50 bar and the diver indicated to the guide when he had reached 120 bar. During the swim back along the cove the diver's fin came loose and it was tightened with the assistance of the guide but this action and keeping pace with the other divers in the party was causing the diver's air consumption to increase. When the diver's contents were approaching 50 bar he signalled the guide and received a signal to ascend. The diver began his ascent but then noticed that the guide and the other diver were not following. He signalled again and once again received a further signal to ascend at which point it was clear that the guide and the other diver did not intend to surface at the same time. The diver continued his ascent alone and experienced difficulty obtaining a breath at 12m and so ascended as fast as possible to the surface. On the surface he made himself buoyant with the remaining gas in his cylinder. He was out of breath, weak and coughing up fluid. The boat responded to his calls for help and he was returned quickly to harbour and transported to hospital where he was found to be suffering from pulmonary oedema. He remained in hospital for two days receiving oxygen therapy and was then discharged. He was unable to fly for fifteen days and so had to make his way home to the UK overland.

October 2009 10/079

A student diver during the first open water dive complained of discomfort in his ear. The dive was aborted and medical attention sought. The student was given medication and told not to dive for two weeks.

November 2009 10/251

Divers were returning to shore following a dive. Conditions were flat calm. The boat coxswain swerved to avoid an object in the water, which turned out to be a bird. Two divers standing behind the coxswain's position were knocked off their feet by the boat's

action and one landed on top of the other. The diver who was landed on complained of lower back pain.

February 2010 10/053

During a training dive a diver complained of discomfort in her ear. The dive was aborted and medical attention sought and the diver was given ear drops and informed to try again. The following day the diver conducted a dive to a maximum of 3m for 15 min but again felt discomfort in her ears. The diver was advised not to dive again for a week.

February 2010 10/069

During a training dive a student diver did not equalise their ears on descent to 3m. The dive was aborted and medical attention sought. The diver was advised not to dive for a week.

March 2010 10/076

During a training dive a diver could not equalise his ears on a descent to a maximum depth of 13m. The dive was aborted and medical advice sought. The diver was advised not to dive for a week.

March 2010 10/070

A group of eight divers were preparing to dive from the shore. One pair of divers were fully kitted and walked approximately 100m to the shore. Before reaching the water one of the divers fell over on the rocks. The buddy and other divers assisted and the diver complained of pain in her knee and elbow and had a small cut on her hand. The diver was able to flex the affected limbs and did not need an ambulance and could walk back to the car. The diver was advised to seek medical assistance and to apply ice and rest but was able to drive home. Subsequently the diver went to hospital and was diagnosed with a fractured lower leg and hospitalised for arthroscopic surgery to clean out the joint. The operation went well and no pins or screws were needed.

June 2010 10/191

An instructor and his student had completed a training dive to a maximum depth of 22m and total duration of 30 min. During the ascent the pair had been close together but on surfacing the student could not see the instructor and thought he may have dropped something or was switching off his shark shield. The instructor had experienced excruciating pain in his right ear during the ascent and had lost consciousness. The instructor was subsequently spotted face down and unmoving on the surface. The cover boat was moved towards him and another instructor entered the water and turned him over. He was found to be breathing through his regulator but he was unresponsive and his eyes were glazed. The diver was de-kitted in the water and a nearby boat came to help. The diver was recovered into the second boat due to it's lower freeboard. Oxygen was administered and the boat made for shore where the diver was met by an ambulance alerted by other boats. The diver was transported to hospital and diagnosed with a middle ear barotrauma. The diver was advised to refrain from diving for thirty days.

July 2010 10/162

During a sheltered water training dive to a maximum depth of 4m a student complained of being unable to get his breath. His regulator was checked and found to be working normally. The lesson was abandoned. It was discovered that the student had recently had tonsillitis. The diver was sent for medical advice and told not to dive for two weeks.

Boating and Surface

November 2009 10/033

On launching a boat for a trip to a shallow reef a problem was encountered with the tilt mechanism on the starboard engine of a twin engine boat. A trip to the workshop rectified the fault. On a previous trip a problem with the bilge pump running continuously had been reported but was thought to have been resolved. On arrival on site the boat tied up to a reef mooring buoy and the engines were switched off. Three pairs of divers, supported by a non-diving boat handler, completed two dives each in two waves. Once the final divers had returned to the boat and were safely onboard with equipment stowed the boat handler attempted to start the engines but found the batteries were flat. The local Coastguard was contacted by mobile phone because the boat radio would also not work due to lack of battery power. The local Coastguard attended within 20 min and provided a spare battery pack with which both engines were started. The boat then returned to port under its own power. The boat was booked in for maintenance and repairs.

April 2010 10/089

A group of divers were returning to harbour in their 8m boat after a day's diving on reefs and a night dive. During the return to port the masthead light stopped working. The cox continued with caution and posted a forward lookout to assist in identifying the marina entrance at night and avoiding a shallow reef. As they approached the harbour at a speed of 4 knots, within the harbour 5 knot limit, the lookout suddenly saw the underside of another boat rapidly approaching from the stern. The boat was estimated as travelling at 20-25 knots and, before an alarm could be raised, the second boat hit the stern of the boat on the starboard engine. The bows of the second boat were deflected upwards and onto an aluminium tube canopy structure of the first boat; this canopy collapsed. Four divers were sitting on the rear seat of the boat and the hull of the second boat narrowly missed one diver's head. The boat's starboard engine was non-functional. The two boats separated and the crew checked for damage, reported the incident to the local Coastguard and took photographs of the other boat for identification. The boat then returned to harbour using it's port engine only.

June 2010 10/149

A pair of divers entered the water on the east side of an island for a planned dive of 45 min. They had previously conducted a dive on the west side and experienced no current. As the divers approached a corner towards the north point of the island, after approximately 28 min, they experienced a strong current that was impossible to swim against and so they decided to surface. The divers ascended completing a safety stop at 6m. When they surfaced they were already 500 m from the island. The surface cover boat did not see them surface but initiated a search 52 min after the divers had entered the water. Two other boats joined the search and the divers were located safe and well, 1 hour later, 3 km from the dive site. Their location was assisted by the divers deploying three delayed SMBs.

Ascents

October 2009 10/025

A diver was conducting a simulated decompression dive as part of his diver training. At the end of the dive the diver ascended to the surface without conducting the simulated stops due to loss of buoyancy control. Interrogation of the dive computer did not indicate a fast ascent.

January 2010 10/066

On the third day of a diving trip a diver was descending slowly with her buddy at the beginning of the dive. Due to problems clearing ears she was slightly above her buddy. At a depth of around 5m she heard a loud bang and felt she had been hit in the neck. She looked around and could see nothing and her contents gauge seemed to be fine and so she continued the descent. At approximately 14m she checked the gauge again and it showed zero. She could not see her buddy as he was directly below her and so she made a direct swimming ascent to the surface making a conscious effort to breathe out. The diver did not experience being out of gas but she surfaced with no gas remaining. Her buddy saw her ascending and followed but as she appeared to be safely on the surface he conducted a safety stop as indicated by his computer. Once recovered back into the boat the diver who had made the emergency ascent took oxygen and re-hydration fluids as a precaution. The diver experienced a slight ache in her bicep and so consulted a diving doctor who advised that the gentle dive profiles and nitrox use should mean that there would be no problems and further advised missing the first dive the next day.

February 2010 10/224

Two divers were decompressing after a dive to 40m. One of the divers reached back to dump air out of the kidney dump on her wing and in doing so air migrated in her drysuit to her feet. This resulted in her feet being pulled from her drysuit boots and a fin being dislodged. In trying to resolve the situation the diver ascended feet first to the surface. Her buddy attempted to assist but was unable to and so he completed his decompression. The buddy surfaced to be recovered by a different boat as the buoyant diver was being taken back to shore. The diver was placed on oxygen and monitored but no symptoms of DCI presented. The diver now secures her boots with additional gaffer tape before a dive.

June 2010 10/192

Two divers were approaching the end of a dive to a maximum depth of 20m. One diver had deployed a delayed SMB and after approximately 30 min the valve on his inflate/deflate hose parted allowing low pressure air to escape. His buddy assisted in trying to disengage the valve from the hose but was unsuccessful. The diver took his buddy's octopus as a precaution . The divers were now at 10m and the delayed SMB line had become entangled around the diver's fins, which his buddy released. In doing so both divers arrived on the surface. Both divers were recovered and checked for any abnormalities. Both computers indicated fast ascent warnings but did not indicate missed stops. The divers continued to be monitored and no ill effects developed. Inspection of the equipment revealed that the threads of the plastic housing had stripped.

September 2010 10/226

A pair of divers conducted a no stop dive to 30m. At the end of the dive the more experienced diver went to deploy a delayed SMB but got tangled in the line and was pulled to the surface. The buddy was not aware of the deployment and when he missed his buddy he minimised his decompression and surfaced as quickly as possible. The more experienced diver was placed on oxygen and monitored but no symptoms developed.

Technique

March 2010 10/075

A dive group had to relocate their planned dive site to an alternative more sheltered site due to adverse surface conditions. A sheltered bay was found and the average depth was determined (12m) using a plumb line. The group were briefed to limit dives to a maximum depth of 15m, to ensure they stayed away from deeper water with rougher surface conditions, for a maximum duration of 1 hour and no required decompression stops. One pair of divers, using closed circuit rebreathers, deployed a delayed SMB after 7 min and surfaced shortly afterwards having been to a maximum depth of 30m. All other divers in the group stayed inshore and did not exceed 12m.

June 2010 10/146

A diver who had not dived for a number of months conducted his first dive abroad with an experienced buddy, whom he had dived with extensively, together with a group of seven other divers and a dive guide. The dive was to a maximum depth of 22m and had a total duration of 40 min. Towards the end of the dive the diver's cylinder pressure gauge had fallen to 50 bar but the guide seemed to be continuing. The diver became concerned that he would not be able to ascend safely with the guide with reduced contents and so ascended using his buddy's alternate source from a depth of 16m to preserve a reserve of gas. Both divers surfaced safely. The dive group remained underwater for longer and many surfaced with less than 10 bar gas remaining.

Equipment

October 2009 10/021

A diver was completing an uneventful dive. After completing an indicated 6m safety stop for 3 min he was continuing towards the surface when his buddies signalled him to stop. They indicated that they still had more stops to complete. On checking his dive computer the diver discovered it was reporting a 20m dive for 44 min. Comparison with his buddies' computers showed that the dive had been to a maximum depth of 27m and a duration of 50 min. A second dive was conducted using tables. The computer recorded a dive to 20m for a duration of 37 min. The depth of the second dive recorded by his buddy was 28m for a duration of 42 min. The computer was more than two years old. The manufacturer advised purchase of a new computer.

January 2010 10/051

An instructor was teaching a group of eight students practicing static alternate air source drills. One of the students' regulators developed a free flow. The instructor attempted to stop the free flow by tapping the regulator but this did not resolve the problem. The instructor then got the student to breathe from the alternate source of another student and then turned off the student's air supply to stop the free flow. Another instructor, who was in the vicinity but not part of the group, was called over by the first instructor who indicated to him that he should donate his alternate source to the student who was without gas and assist him to the surface. The second instructor did so and on the surface found that he could not inflate the student's BCD with the direct feed and so inflated his own jacket in order to support the student. He got the student to orally inflate his BCD and then both exited the water. The first instructor continued teaching the remaining seven students in his group.

February 2010 10/054

A dive guide was leading a group on a dive and the whole group were making their way to the anchor line for a safety stop when one of the divers ran out of air. The diver tried to get to the dive guide for assistance but he was too far away and so the diver made his way to the surface without a source of gas. The dive guide followed him to the surface, checked he was

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alright and then brought him back down to 6m using the guide's alternate source and they completed an extended safety stop of around 5 min. After the dive the diver was monitored for signs of DCI but none were found. The diver's contents gauge was found to be reading 60 bar even though the cylinder was empty.

March 2010 10/078

Three divers entered the water for a planned dive on a wreck to a maximum depth of 42m for a maximum of 45 min duration to include no more than 8 min decompression stops. Two divers were using open circuit equipment and one was using a closed circuit rebreather. After 10 min the rebreather diver's mouthpiece came away at depth. The diver bailed out onto his inboard bailout. He was unable to fix the problem and so switched to his off-board bailout and aborted the dive. During the ascent there was a problem with the contents gauge on the off-board bailout cylinder and so the ascent was completed on the alternate source of one of the open circuit divers. On surfacing the divers swam back to the boat which was moored to the dive site.

June 2010 10/147

A student was about to enter sheltered water for a training dive when his high pressure hose burst. The hose was replaced and training resumed. No injuries occurred.

INCIDENT REPORTS

If you would like to add to, correct or place a different interpretation upon any of the incidents in this report please put your comments in writing and send them to the following address:

The Incidents Advisor,
The British Sub-Aqua Club,
Telford's Quay,
South Pier Road,
Ellesmere Port,
Cheshire,
CH65 4FL.

For new incidents please complete a BSAC incident report form and send it to BSAC HQ at the address shown above.

All personal details are treated as confidential.

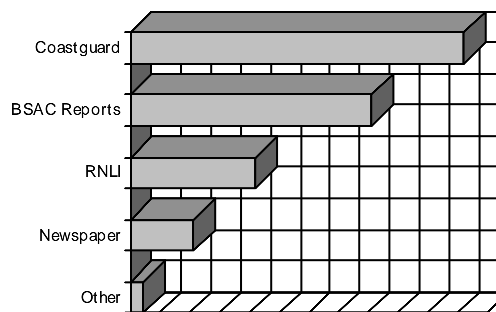
Incident Report Forms can be obtained free of charge from the BSAC Internet website
http://www.bsac.com/page.asp?section=1046§ionTitle=Incident+Reporting
or by phoning BSAC HQ on ***0151 350 6200***

Numerical & Statistical Analyses

Statistical Summary of Incidents

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Incidents Reported	439	465	453	409	498	499	437	401	416	453	412
Incidents Analysed	417	458	432	392	445	474	418	377	381	409	393
UK Incidents	384	433	414	366	423	441	379	349	359	381	364
Overseas Incidents	33	25	18	26	22	33	39	28	22	28	29
Unknown Locations	1	0	0	0	0	0	0	0	0	0	0
UK Incident - BSAC Members	113	122	149	162	154	160	148	120	129	120	116
UK Incident - Non-BSAC Members	52	94	55	74	72	65	50	61	65	29	30
UK Incident - Membership Unknown	219	217	211	130	197	216	181	168	165	232	218

UK Incident Report Source Analysis



Total Reports: 522
Total Incidents: 364

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History of UK Diving Fatalities

		Number of Fatalities	
Year	Membership	BSAC	Non-BSAC
1965	6,813	3	-
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	-
1978	**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
1984	**32,950**	**8**	**5**
1985	34,861	8	6
1986	**34,210**	**6**	**9**
1987	34,500	6	2
1988	**32,960**	**10**	**6**
1989	34,422	4	8
1990	**36,434**	**3**	**6**
1991	43,475	8	9
1992	**45,626**	**9**	**8**
1993	50,722	3	6
1994	**50,505**	**6**	**6**
1995	52,364	9	9
1996	**48,920**	**7**	**9**
1997	48,412	4	12
1998	**46,712**	**6**	**16**
1999	46,682	8	8 *
2000	**41,692**	**6**	**11**
2001	41,272	9	13
2002	**39,960**	**4**	**10**
2003	38,340	5	6
2004	**37,153**	**6**	**19**
2005	37,185	5	12
2006	**35,422**	**4**	**12**
2007	34,857	7	5
2008	**34,325**	**6**	**4**
2009	32,790	7	7
2010	**32,229**	**8**	**9**

Note
* 1999 Figure corrected from 9 to 8 due to a double count discovered in 2010

LIST OF ABBREVIATIONS USED IN THIS AND PREVIOUS INCIDENT REPORTS

A&E	Accident and emergency department at hospital
AED	Automated external defibrillator
ARCC	Aeronautical rescue coordination centre
ARI	Aberdeen Royal Infirmary (Scotland, UK)
AV	Artificial ventilation
AWLB	All weather lifeboat
BCD	Buoyancy compensation device (e.g. stab jacket)
CAGE	Cerebral arterial gas embolism
CG	Coastguard
CCR	Closed circuit rebreather
CPR	Cardiopulmonary resuscitation
CRT	Coastguard rescue team
DCI	Decompression illness
DDRC	Diving Diseases Research Centre (Plymouth, UK)
DSC	Digital selective calling (emergency radio signal)
DPV	Diver propulsion vehicle
ECG	Electrocardiogram
ENT	Ear, nose and throat
EPIRB	Emergency position indicating radiobeacon
FAWGI	False alarm with good intent
FRS	Fire and rescue service
GPS	Global positioning system
Helo	Helicopter
HLS	Helicopter landing site
HMCG	Her Majesty's Coastguard
ILB	Inshore lifeboat
INM	Institute of naval medicine
IV	Intravenous
LB	Lifeboat
MCA	Maritime & Coastguard Agency
m	Metre
min	Minute(s)
MOP	Member of the public
MRCC	Maritime rescue coordination centre
MRSC	Maritime rescue sub centre
PFO	Patent foramen ovale
POB	Persons on board
QAH	Queen Alexandra Hospital (Portsmouth, UK)
RAF	Royal Air Force
RHIB	Rigid hull inflatable boat
RN	Royal Navy
RNLI	Royal National Lifeboat Institution
ROV	Remotely operated vehicle
SAR	Search and rescue
SARIS	Search and rescue information system
SMB	Surface marker buoy
SRR	Search and rescue region
VLB	Volunteer life brigade
999	UK emergency phone number

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