Sam Walder

University of Bristol Underwater Club

Room 1.9 Queens Building

Bristol, BS6 1TR

[equipment@ubuc.org](mailto:equipment@ubuc.org)

+44 (0) 7557 882 538

January 3, 2018

Apeks Marine Equipment

Neptune Way

Blackburn

United Kingdom

BB1 2BT

Dear Recipient,

I am contacting you as the Equipment Officer of the University of Bristol Underwater Club (UBUC). I contacted your customer support number recently to ask for some advice with a problem we seem to be experiencing with many of our gauges and was advised to send in the affected items.

As a BSAC club, we hold a stock of regulators for member use, at the present time we have around 30 working sets. Historically, we have used Scubapro regulators, though in the last few years we have started to shift to using DIN rather than A-clamp and also switching to Apeks regulators.

All our Apeks regulator sets are ATX40 first stages with DS4 second stages, each set has the same two window gauge set (depth and pressure). According to the records that I have inherited, we purchased most of our Apeks stock in 2016 but have been buying them since 2010.

I have noticed that we have been having a recurring issue with the contents gauges and enclosed you should find 3 examples that I happened to find recently. The issue seems to be that water is entering the housing of the contents gauge. Initially this does not affect the operation, though as time goes by, there is a set of symptoms that we see. Firstly, the gauge will begin to “read low”, so when it is attached to a full cylinder it will not correctly read the pressure in the cylinder. As many of our members are novice divers, this is often not noticed and thus goes unreported. After some time the gauge will begin to read high as well, essentially as the needle gets stuck. We had one example of this that was fortunately caught during training, where a gauge was reading 150 bar on a tank that had around 10 bar left in it. Finally, the gauge will cease to work at all and eventually corrosion will become visible.

Now that I am aware of the issue I have been able to start looking out for it, as it only seems to be a small amount of water it is often only visible when the gauge is tilted on one side.

We have 22 sets of Apeks regulators, of which only 3 still have working gauges. I have been keeping records of the problems I have found in my time as Equipment Officer, although the previous Officer failed to do so. This means that although I know that I have thrown away 2 gauges and sent 3 to you with this letter, I am unable to account for the missing 14 gauges. Speaking to the previous officer it is clear that several were discarded due to this issue, however I only have verbal evidence for this.

I was hoping that you may be able to have a look at the gauges enclosed and advise as to whether this fault is occurring due to mistreatment on our part or a manufacturing issue? As we have had so many failures and they each could cause us safety issues, I am very keen to find and fix whatever is leading to these failures.

The serial numbers of all our Apeks regulators first stages are as follows (according to my records):

* 10064655
* 10064649
* 10064651
* 10064646
* 052N38600
* 1501 04671
* 1603 03034
* 1703 05801
* 1501 04665
* 1006 4655
* 1603 03076
* 1703 01186
* 1006 4651
* 1603 03036
* 1501 04671
* 1603 03038
* 1702 09031
* 1603 03031
* 1603 03052
* 1703 05800
* 1502 01387
* 1502 01391

I would appreciate a swift response as we are keen to fix these regulators before our training restarts in the latter half of this month.

Sincerely,

Sam Walder,  
UBUC Equipment Officer