

AMBSC CHAIRMAN'S REPORT 2014/2015

Since I have just been appointed to this position I am not able to give a report of past proceedings, although I believe that things have settled down after the crisis over our exemptions in Victoria early in the year.

However there are matters that I would like to make a comment on.

As boiler inspectors (BIs) we have a duty of care to abide by the boiler codes. Any decision that a BI makes regarding the design approval, testing or re-testing of any boiler has to be backed up by adherence to the codes. In this litigious society that we live under any deviation from the codes by the BI could become a liability in a law court and the BI could be liable for the consequences.

There has been a tendency lately for boilers that were built prior to the codes and boilers coming to Australia from overseas that are being presented to BIs for testing, with the expectation they should be passed.

I would urge BIs to thoroughly examine these boilers and determine whether or not they comply to the relevant codes. It is not sufficient to just hydraulic and steam test them.

I have personally observed a copper boiler for a 5in gauge Britannia locomotive from UK that had various serious faults in its construction that were not apparent till the boiler was condemned for scrap and subsequently cut open for inspection.

I will detail some of the faults:

This boiler had only 2 Z stays connecting the firebox crown sheet to the outer wrapper which were brazed to the crown sheet and only riveted to the outer wrapper, no braze or silver solder at all.

Sometime in its life the boiler had had a low water event and the crown sheet had collapsed down into the firespace and in so doing had torn the Z stays from the outer wrapper. The rivets had completely pulled through the Z stay. An attempt to repair this was a homemade brass staybolt through the crown sheet and outer wrapper to pull it back into line, not successfully. This stay had then been caulked with soft solder.

It was also apparent that the combustion chamber had sprung leaks. To repair this someone had cut 4 large ports into the barrel about 50x70mm to enable a silver soldering operation to be carried out. Large squares of copper sheet had then been brazed over the ports.

There were no longitudinal stays between the smokebox tubeplate and the backhead and no reinforcement of these plates either. Examination of the firetubes revealed severe pitting on some of the lower tubes.

The barrel had been rolled and butt strapped with a brass brazed joint. The butt strap was sectioned in various places and it was obvious there was very little penetration into the joint. I had suspicions that the filler material could have been a brass based material because there was evidence of dezincification. Therefore this ended up as 35kg of scrap copper. The owner told me that when he hydro tested the boiler there were many leaks from stays and joints.

Subsequently he has built a new boiler for this locomotive and coupled to the good workmanship of the chassis builder it is a good performer on the track.

A letter was circulated to all BIs last year regarding the competency of operators of miniature boilers. I started in this hobby during the mid 1970s and I was living in New Zealand at that time so I cannot comment on the introduction of the boiler codes in Australia. However I was involved in a small way with the introduction of the codes of practice and remember there was negativity about their introduction. The boiler operators certificate discussion will no doubt bring a lot of negativity too.

The hobby adopted the various boiler codes and codes of practice, this has enabled us to be self-regulating free from interference. We may eventually have to adopt boiler operators' certificates as well. It would be to our advantage to adopt them on our terms. We are deemed competent in our every day lives to operate cars, boats, machinery and firearms, etc. - miniature boilers may be next. I will keep an open mind.

THINK SAFETY, ACT WISELY AND KEEP ON STEAMING!

John Auty

Chairman AMBSC