

# Index

○ SUMMER | ○ 2013

Newsletter of the  
Commissioning Specialists Association

PROFICIENT PROFESSIONAL COMMISSIONING

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## Monte Carlo or Bust!

"THE THREE MICRA-TEERS" law, Jon Switters. They bravely  
Chris Davey, Clive Vaus and drove from Essex to Monte  
Albert Harrison raised over Carlo in a "banger" (1996  
£2,500 for Cancer Research UK Nissan Micra) in 5 days  
in memory of Chris's brother-in- (Read more on page 4)



**New Members** We would like to welcome the following new members to the Association  
**CORPORATE:** Triobiz LLC, UAE

**ASSOCIATE:** Water Treatment Products Ltd, Pontypool. SAV UK Ltd, Woking. The Maintainers, Doha GCSI Ltd, Kent, Concept Environmental Solutions Ltd, Bristol, Operational Intelligence, Kingston, Surrey.

**INDIVIDUAL:** Joel Harland, George Spackman, Jordan Catterall, Matthew Carlin, Stephen Berry, Kevin Waite, Keith Moss, Rakesh Pinto, James Hutchinson, Jonathan Giffin, James Sargent, William Holmes, Owen Edwards, Jev Dilekkaya, Barney McQueen, Aidan McDonnell, Jordan Bennifer George Charlesworth, Louis Clackett, Ian Harwood, Samarthan Rajaratnam, Daniel Eaton

**INDIVIDUAL ASSOCIATE:** Tarek Omar, Khaleel Nasser



# Jules' News

Welcome to our Summer "Scorcher" edition of Index!

Anyone who has not paid their annual membership fee for 2013 has been lapsed. Corporate & Associate lapsed members will also be taken off our members list on the CSA website.

Individual members who have lapsed have been removed from our database.

Any lapsed individual members wanting to return at a later date must re-apply for Individual membership and will need to complete a new Individual application form, supply their current CV, an electronic photograph and any professional references where applicable.

## Grade 4 Exam

### Results (May 2013)

The Grade 4 Technical & Theory exam took place on Saturday 18 May and Congratulations go to all those listed below who passed:

|                       |                        |                        |
|-----------------------|------------------------|------------------------|
| <b>Alan Kent</b>      | <b>Ian Powell</b>      | <b>Danny Gilliland</b> |
| <b>Dave Rowland</b>   | <b>Matthew Bonnick</b> | <b>Graeme Duncan</b>   |
| <b>Joel Evans</b>     | <b>Daniel O'Rourke</b> | <b>Phillip Hunt</b>    |
| <b>Shaun Williams</b> | <b>Paul McGrane</b>    |                        |
| <b>Kurt Mitchell</b>  | <b>Mark Rawlings</b>   |                        |

**The next Grade 4 Exam is scheduled for Saturday 19 October 2013.** Anyone wishing to take this exam should e-mail the CSA office ([office@csa.org.uk](mailto:office@csa.org.uk)) as soon as possible and we will e-mail you a "mock" exam paper which gives an example of the type of questions you are expected to answer.

## Distance Learning Course (DLC) TEST RESULTS

Congratulations to those listed below who have recently passed the DLC A, B tests & DLC C course:

### DLC A

**Nick Boardman**  
**Jack Doak**  
**George Spackman**  
**James Tunwell**  
**Gareth Britton**  
**Patrick McMahon**

### DLC B

**Barry Gibb**  
**Daryl Huges**  
**Daniel Thorne**  
**Declan Govier**  
**Callum Jokubaitis**

### DLC C

**Nathan Tomlinson**

## TECHNICAL Q & A FORUM



The Committee have agreed to discontinue this service at the end of the year (2013). We will move this facility to LinkedIn and anyone who has a technical question will be able to do so via LinkedIn



## AN IMPORTANT DATE FOR YOUR DIARIES

### CSA AGM FRIDAY 25 APRIL 2014

The Annual General Meeting and luncheon is booked for **Friday 25 April 2014** and will be held at The Grosvenor Hotel, London SW1. This was a great success last year and everyone enjoyed the new venue so we decided to hold it there again this year. Invitations will be sent out to all our members at a later date.

If you would like to enroll on a DLC Course – download the appropriate enrolment form from the CSA website [www.csa.org.uk](http://www.csa.org.uk), complete this in full and send/e-mail it to the CSA office with payment and Michelle will send the course out to you with the course procedure and details of your allocated tutor. If you enroll on one of our Distance Learning Courses and also wish to apply for Individual membership at the same time you can receive the **first year's Individual membership free!** All you need to do is, again, download the latest Individual membership application form from the CSA website, under members section. This form must be completed in full, do not leave any sections unanswered or it will be rejected, then e-mail the application form to the CSA office [office@csa.org.uk](mailto:office@csa.org.uk) with your current CV and a photograph. This is then sent to our Assessment panel for approval and grading.

Julie Parker – CSA Secretary



# Going back to the future

## Marflow Hydronics

Water distribution systems in buildings started as very simple gravity fed systems without pumps. This was until the development of forced water distribution systems, which brought with them the introduction of differential pressure. As time has moved on, managing this pressure has been a major task, with new products being frequently launched to help create better control whilst trying to save energy. Such products are balancing valves, 2 port control valves, differential pressure control valves and then, more recently, pressure independent control valves (PICVs).

PICVs were developed to help simplify the water distribution systems, and Marflow Hydronics sells two types that work in the more familiar format: Axial and Rotary. These have been a great innovation that combine the operation of three different valves – the differential pressure control valve, regulating valve and 2 port control valve - in one convenient and compact unit. Use of these valves in a commercial heating or cooling system allows comfort levels to be optimised at a much reduced cost, decreasing ongoing energy consumption and improving the efficiency of the system to outstanding levels.

Up until now, the PICVs had been the greatest innovation to help drive down costs and increase energy savings, but despite the major advantages, they do not eliminate energy wastage completely. This is the next step. Marflow Hydronics, working with Belparts, is now supplying the Dynamx Electronic Balancing valve,

which Marflow Hydronics sells under the PICV banner, making up the 3<sup>rd</sup> product in the company's complete PICV offering. Using it in a water distribution system will completely revolutionise the system's management, taking us as an industry full circle, back to the days when pressure didn't matter and it was all about flow.

The Dynamx valve doesn't need the same high pressure to move the water around a system, instead it's more about letting water move where it needs to be in the most efficient way possible, all the time just controlling the flow, never requiring a large amount of pressure. Immediately the energy savings are apparent, but more than that it also increases durability of systems as there is less force to add stress to joints and mechanical parts. In addition, the water flows more effectively around the system as it's naturally left to go to where it's needed and not pushed in set directions, also eliminating the excess energy that's so often wasted in the more mainstream systems used today.

It's like water flowing through sluice gates than being forced.

Electronic balancing also provides further advantages in that systems can be trouble-shooted far more easily as more information is at the user's fingertips. Commissioning can also be done with greater ease, even after building occupation, allowing for continuous commissioning to take place as and when it's needed

It seems the best way to move forward is to go back to how it used to be done, with greater control, better management, less costs and far less energy.

To find out more about electronic balancing from Marflow Hydronics call 0845 643 9096,

Email: [solutions@marflow.co.uk](mailto:solutions@marflow.co.uk)  
or visit [www.marflowhydronics.co.uk/dynam](http://www.marflowhydronics.co.uk/dynam)

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# MONTE CARLO OR BUST

(cont'd from front page)

**T**hat looks a great idea I thought, as I read about a fun car rally called "Monte Carlo or Bust" in our local paper. A check on the website gave me all the information I needed.

Entries were invited to join a "fun banger rally" of around 75 cars, each costing less than £250, to drive to Monte Carlo over a 3 day period!



After much deliberation we chose a 1996 Nissan Micra and, as there was three of us in France, we decided on our theme of "The Three Micra-teers". We also decided to invite sponsorship from friends and family to raise money for Cancer Research UK as I had lost my brother in law to pancreatic cancer some 3 years ago.

We decided to write the name of our sponsors on the car in permanent marker so in effect our sponsors came with us. The CSA were fantastic in giving us £200 and gave us proper printed stickers for the car.

The rally started at 9.00 on Friday 12<sup>th</sup> July in St Quentin, France in a Carrefour supermarket car park.

***We've raised over £2500 for charity and had a great time in the process."***

The effort some people had put into decorating their cars and fancy dress was incredible, from "The Wacky Races" theme, through "The Crash Test Dummies" to a female team called "The

Double D's" (you can work that one out yourselves!!)

Our first leg was to drive to Dijon with various tasks and photos to gather on the way, things such as a photograph of all members of the team with blue tongues, a member of the team dressed totally in pink, a petrol receipt for half a euro, a used railway ticket and about 20 other difficult (if not impossible!) challenges.

Friday night was check in and party time (except for the poor designated driver for the first drive the next day!)

Saturday brought more impossible challenges and a drive to Turin over the St Bernard mountain pass in Switzerland, which

was a test for many of the cars!

Then it was time for, you guessed it, check in and party time again!

On Sunday it was a short 2 hour drive into Monte Carlo where we all drove round the square outside the Casino Monte Carlo in full fancy dress and parked next to Lamborghinis, Ferraris and Rolls Royce's which pleased the man trying to organise the valet parking no end!

As none of us could afford to stay in Monte Carlo we then drove just down the coast to Nice where (oh no, not again!) we checked in and partied!

Prizes were awarded for winning each of the day challenges (not us) best decorated car (not us), best fancy dress (not us) and best team spirit (where we

were narrowly beaten by the Double D's!)

As about half of the teams were scrapping their cars in France and flying back, we were offered at least six cars for free, from a stretch Ford Granada limousine to an Audi 80 with 44,000 miles on the clock but covered in brown fur with ears and a floppy red tongue! Very tempting around midnight after a couple of beers but not so much in the cold light of day, thinking about the cost of petrol, tolls and Eurotunnel.

We weren't about to swap cars either after our little Micra had been so good to us.

After a day of rest in Nice on the Monday we started out at 7.00 in the morning on the Tuesday for the 750 mile trip back to Calais. We arrived in Calais at 8.00 in the evening after 13 hours of driving on French motorways in 25 degree heat with no air conditioning (hardly tiring at all!)

We never even lifted the bonnet to check the oil and water in over 2000 miles of driving and when we did the day after we got back the levels were fine.



We've raised over £2500 for charity and had a great time in the process.

Would we do it again – you bet, we can't wait for next year!

Don't worry, you can still donate on [www.justgiving.com/Chris-Davey3](http://www.justgiving.com/Chris-Davey3)

*Chris Davey*



## KEITH STRUGNELL RETIRES AFTER 25 YEARS IN INDUSTRY



**W**e often welcome people into our industry or mourn the loss of our friends and colleagues, but rarely do we mention people who have spent a considerable amount of time commissioning and who are now retiring.

That brings me to my friend and colleague Keith Strugnell who has spent over 25 years in our industry and has now decided to retire from site work.

One of my first memories of Keith is when I first met him back in 2003 buried under a pile of paperwork at a job in Woking, and some of my more recent memories are of him buried under a pile of paperwork in the Commtech office!

Keith is a hard-working, knowledgeable and respected commissioning engineer who has passed on some of his experience and wisdom to the next generation over the years.

Keith is now retired from site work but still works on our quotations from time to time here at Airtech Premier Ltd.

Keith has managed to sum up his 25 years in the commissioning world into a few paragraphs as below.

Good luck in your retirement and thanks for all your contributions to our industry!

*Andrew Watkin*

August 2013

I started working in the Commissioning world when I joined Commtech in January 1986 at the ripe old age of 39.

My initiation was at the Lloyds building where I worked for about a year. It was a bit of a shock having to get up so early to get into London for an 8 o'clock start!

*“I was learning something new nearly every day”*

Getting to grips with the basics takes quite some time and in fact I was learning something new nearly every day throughout my commissioning career.

I worked on a number of fairly large projects including Ropemaker Place, The Daily Mail Surrey Quays, Farringdon Street, Chelsea & Westminster Hospital, GlaxoSmithKline Crawley, Worthing and Hastings Hospitals and McLaren Woking to name but a few. I was also fortunate being

able to work in Italy for a couple of months.

I enjoyed working with a good, knowledgeable bunch of lads until I gave up site work and moved into the Commtech office in 2006 to join Andy Watkin and help with client liaison, quotes and labour requirements, amongst other things.

On becoming redundant in July 2010, I was only 6 months short of working for Commtech for 25 years so I never got that silver tankard or gold watch in the end.

After few months of leisure I obtained freelance work quoting for Moore Environmental which took me up to my official retirement age of 65.

I have continued to do a bit of freelance work, both on site and quoting, for a couple of commissioning companies, so have been able to earn a bit of pocket money to supplement my pensions.

I am still quoting, but my site boots have now been hung up for good.

Retirement is brilliant!

*Keith Strugnell*

August 2013



## Chairmans Say

### *Construction digging its way out of recession*

*Good News! Britain's Summer 'Heat wave' and sporting achievements brings about a feel-good factor that finally appears to be transferring to the economy*

Who would have thought Britain could top last years sporting successes. I remember avidly reading Neil Whites footnote in his final 'rant' as Chairman, as the list of sporting achievements of 2012 were noted. Well, they've done it again, with Andy Murray finally giving Britain a Wimbledon winner. The successes of the Lions down under, The Ashes win, Chelseas European endeavours (again), the list goes on. Hot on the heels of these successes comes the news

that the three Cs are all showing positive signs in terms of employment. The first 'C' (Construction), has endured a torrid time since the start of the recession which has seen many of our Corporate members facing some of the toughest market conditions since their inception. It is a credit to the acumen of these business leaders that our sector of the industry has suffered such few casualties. The Construction sector is now the 'most improved' this quarter and the shoots of recovery can be seen by the rising demand for engineers.

Nowhere is this more visible than in the Capital, the second of the three 'C's. Glancing across London's skyline you can see more tower

cranes than in the rest of the country put together. However the regions are also posting positive results and the outlook is optimistic for the rest of the year.

*"It is a credit to the acumen of these business leaders that our sector of the industry has suffered such few casualties"*

This brings me neatly to the third 'C' (Consistency) whereby we have seen two quarters of UK hiring intentions at +5% and +6% leading to the optimism that 2013 is truly the year of recovery.

Long may it continue.

## CSA embarks on Overseas Representations

This Autumn is shaping up to be an exciting time for the Association as we look to expand our Global activities.

This September will see the final hurdles negotiated and the roll out of the first phase of the CSAs Overseas Representation. Initially, representatives will be appointed in both the UAE and New Zealand with Australia due to follow within a few weeks. Dependant upon the uptake, it is the intention to form Regional Chapters as soon as possible and support these areas with our renowned training, accreditation and literature.

As current UK subscribers, this will obviously increase the value of your membership as CSA accreditation becomes more Internationally recognised and will travel well for those of you realising opportunities abroad.

Encompassed within the role of these representatives, is to promote the CSA and establish Committees utilising much the same model as that which has been so successful here in the UK.

The names of these individuals will be published in Autumns edition of Index, therefore if you are currently a member within these regions and would be interested in supporting the OR or would like to join a committee then please contact the [office](#) for more details.

## CSA offers its support to the UKGBCs successful Green Building Series.

The Green Building Series (Phase 2) is a set of eight one day courses, held over a period of nine months. Of particular interest to CSA members, are the 'Commissioning for success - Fine tuning for handover'(29th April 2014) and 'Efficient Buildings - Optimising operational performance' (5th June 2014) courses for which CSA members can expect a favourable discount. There is also 6 hours of CPD accredited training recognised per course and fellow supporters of the Series include CIBSE and CIOB. For more info or to book your place, please click through: [www.ukgbc.org](http://www.ukgbc.org)



Matthew Ward—Managing Director  
Prime Environmental Services Ltd

# Speakers Corner

In this edition, Keith Barker, writes on behalf of one of our Associate Members in respect of the frustrations faced as a technical author when collating the record information for the Project O&Ms and poses the questions: *Could we do better? If so, why aren't we?*

## COMMISSIONING ENGINEERS & TEST SHEETS

CSA Associate Member Tectonic Techniques Ltd. is a technical authorship that produces the complete range of record documentation for the construction industry. We see a continual stream of test sheets and pose the question “How can commissioning engineers/managers ensure a good standard of test sheets?”

Air and water balancing test sheets are mostly of a reasonable standard, but have been around for some time. Perhaps it's time for a reminder of some aspects of those sheets.

Be consistent when labelling plant, is it AHU1, AHU01 or AHU-01? Make sure the same reference is used in all paperwork. Ensure system descriptions are correct and consistent; is it East Supply, East Office Supply or East Office General Supply? It is especially important where systems only cover some of the floors in the building. Again be consistent, is it 1<sup>st</sup> – 4<sup>th</sup> floor or levels 1 – 4?

*“These days there is generally a technical submittal containing the information – ask for it.”*

Fan/pump sheets generally have separate sections for fan/pump details and motor details. Motors usually have detail plates that provide the required information, but the fan/pump may have no such plate. It is important that commissioning engineers establish what that information should be and insert it in the relevant box on the sheet. Whoever ordered the plant from the manufacturer must have the necessary information. These days there is generally a technical submittal containing the information – ask for it.

It is important to differentiate between fan and AHU details. The fan might be a Ziehl Abegg, but it is fitted in a Systemair DV80 AHU.

Where fan or pump curves are provided as part of the test sheet pack, make sure the plant reference, e.g. AHU01, is shown on the page.

Of course, these days many plant items are inverter driven. Ensure that the final inverter reading is shown on the fan/pump sheet.

Where balometers or hoods are used to regulate a system, there should be a ‘Hood Factor Calculation Sheet’. Fine, but are the terminals / volume test point used to provide the figures clearly identified on the calculation sheet or the relevant terminal / volume sheets?

Most test sheets have a comments section. Make use of it to include information for which there is no other specific place.

Often test sheets/commissioning reports provided by manufacturers and suppliers for significant plant items such as chillers, boilers and booster sets can be improved in the following areas:

- Sheets do not identify the plant using the reference number used on the site, is it boiler B1 or B2 that the sheet refers to?
- Sheets are often multi-part format. The customer only ever gets the 2<sup>nd</sup> or 3<sup>rd</sup> copy, which is practically illegible – insist on a legible copy.
- Not all of the entries on a sheet may be applicable to all equipment. Those not relevant to the equipment being commissioned should be crossed out or marked N/A, not just left blank.
- Sheets rarely provide proper information on the equipment. On a multi-pump pressurisation set, the model number won't tell you how many pumps it has, nor what model of pump is fitted. Often the manufacturers cannot tell without looking in their records for the serial number.
- Simple information such as what power supply is used (230V/1ph/50Hz or 400V/3ph/50Hz)



is absent.

- How many expansion vessels are fitted with a booster set or what size they are? Don't bother to look; it's not there.

Basic commissioning information is not provided, e.g.:

- Cut in/cut out pressures for the pressurisation unit pump(s) is not stated.
- The cold fill pressure of expansion vessel(s) is not stated
- Is there an adjustable run-on timer on a cold water booster set once the system pressure has been achieved? The time it has been set to won't be stated.
- Boiler reports don't identify what the control and alarm temperature thermostats have been set at.
- Chiller reports won't identify the compressor FLC or what the actual measured current draw at 100% load is.

Effectively the information provided in these reports is just model number, serial number and the date of commissioning. There is no indication that the equipment meets the specified requirements and no information against which a maintenance engineer can monitor the plant performance.

Remember, a test sheet is only as good as the information it contains and reflects on the engineer who submits it.

*Keith Barker*



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