

Newsletter

UK Nuclear Human Performance Forum

March 2015

Welcome readers old and new

This is the fifth newsletter provided by the UK HU Forum, and this time we've gone to a wider audience distribution, so it may be the first time you have received it. We've done this in recognition of the growing interest in the field of Human Performance.

Our Forum was established in 2008, consists of the representatives of the various licensees, Cogent and NSA and is sponsored by the UK Nuclear Directors Forum. The Forum is on occasion attended by the ONR and NDA.

Since our last issue, the group have completed a number of work activities including the development of a Human Performance Fundamentals Training Standard, a Practitioners Training Standard and a Blueprint for establishing a Human Performance strategy within an organisation.

With the departure of Alan Brandwood, Paul Newman from EDF Energy is our new sponsor. We would like to thank Alan for his support and wish him all the best for the future.

A word from our new Sponsor

I have recently taken over the Safety Directors Forum sponsorship of the HU Forum. It is clear that the team are highly professional and enthusiastic in their drive to pursue excellence in Human Performance across our industry. There is a clear recognition that "excellence" does not stand still and is always being moved forward by somebody. So it is great to see that the group have developed the basis of a strong HU programme, a "Blueprint" for excellence. In addition there is good work ongoing around supporting training standards as well as continuing to benchmark across the industry.

A key catalyst for improvement can be suggestions from others during benchmarking as well as honestly evaluating how you are doing yourself. I am pleased to see that the group continue to benchmark with each other at different sites openly offering and receiving opportunities for improvement and recognition. They are also now moving forwards to develop a self assessment maturity matrix. There is clearly a strong, open learning culture amongst all involved which is great to see.



Paul Newman, Safety Director, NNB, EDFE

Lastly my thanks go to Liz Auty from EDF Energy who has chaired the sub group for the last 18 months and is now stepping down and to Ray Hardman from Westinghouse who has agreed to take on the sub group chair role.



Event investigations: An iceberg sank the Titanic, right? Wrong!

If you investigate why the Titanic sank, you'll realise an iceberg was just the final straw.

"There were a whole host of contributory factors," says David Buchanan, a professor at Cranfield School of Management.

"The lookouts in the crow's nest didn't have binoculars – they'd been mislaid on the ship's sea trial and had never been replaced. The sky was clear that night, and the sea was calm – perfect sailing conditions, but icebergs are difficult to see at night when there are no waves breaking against them. This is just the beginning – there were many other factors in play."



The same can be applied to other catastrophes, such as the Deepwater Horizon oil spill and the loss of the NASA shuttles Challenger and Columbia.

"There's always a short answer as to what caused an event, and a longer answer. In the Challenger disaster, for example, you could say it was caused by O-ring failure. But the investigation unveiled a whole series of contributory causes including managerial and organisational problems, communication breakdown, and poor management of subcontractors. What this means is that in most cases the fundamental cause of the extreme event comes down to failures in the system itself."

One of the reasons is that complex causality allows blame to be thrown around like a hot potato. Which is, unfortunately, something that human beings are pretty good at.

"Have you ever put petrol into a diesel tank? If you have you'll remember how angry you were at yourself. But rationally you can understand why it happens. You're tired, caught in traffic, running late, just dropped your keys, can't find them in the dark and then – in anger – you unscrew the petrol cap, press the handle and it's too late. And even after all the contributing factors, you blame yourself.

"We as human beings have a strong desire to want to attribute blame. This is known as the fundamental attribution error and it means holding individuals to account while ignoring the context in which they were operating. It's an extremely strong desire and very difficult to overcome."

In other words, while extreme events are in the majority of cases systems errors, the fundamental attribution error kicks in and we all want to see someone on the gallows.

As well as a pre-occupation with blame, our approach to investigating extreme events does not allow us to paint a full picture of why the system failed.

A moment to reflect:

- What is the first question individuals ask when your organisation has an event?
- Do you have a 'Just Culture'?
- How does your organisation approach investigations?
- How do you uncover organisational weaknesses?
- How do you ensure actions are robust enough to prevent future repeat events?

EDF Energy welcomes Forum members to Heysham

EDF Energy welcomed the UK Nuclear HU Forum to the Heysham Training Centre in Lancaster in November 2014. We welcomed our new Sponsor, Paul Newman, to the meeting and Paul gave an overview of his last thirty years in the industry, including his involvement with Human Performance.

The meeting mainly focused on drafting a Scope Statement for the development of a Leaders Training Standard in Human Performance. Our workstreams for 2015 were also agreed, along with meeting dates and benchmarking opportunities for the next twelve months.



(L-R) Paul Newman (EDF Energy – Forum Sponsor), Paul Unsworth (Cavendish Nuclear), Charlie Bray (NSAN), Alastair Melvin (Sellafield), Ray Hardman (Westinghouse), Jo Johnstone (Magnox), Mandy Carter (Magnox – Forum Secretary), Liz Auty (EDF Energy – Forum Chair), John Crowl (Babcock Marine), Reg Rudd (Doosan), Michael Pattinson (LLWR), Martin McManus (Cogent), Naomi Slade (Babcock Marine), Sarah Peck (NNL), Tony Gaskell (Magnox), Gary Taylor (Rolls Royce Submarines)

Blueprint

The UK Human Performance Forum has developed a Blueprint for Human Performance. This work was prompted by the sheer number of ideas and opinions on what makes a good Human Performance Programme. The Blueprint is meant to give structure and ensure we have some recognised standards for a nuclear Human Performance Programme. After some work the task team identified 7 key pillars of Human Performance:-

1. Organisation Culture
2. Leadership & Accountability
3. Engagement
4. Capability
5. Reporting, Learning & Measurement
6. Managing Defences (Latent Error Programme)
7. Point of Work Error Avoidance (Active Error Programme)

These key pillars are underpinned by several elements which build a firm foundation for any organisation's Human Performance Programme. To check the pillars were hitting the mark, Andrew George, Head of Human Performance for Sellafield benchmarked the blueprint at the INPO Human Performance Conference in Baltimore, USA. The feedback from the conference was very positive with the delegates agreeing the pillars were in line with their thoughts. They also identified what they felt were the underpinning elements. All agreed the Blueprint delivers an excellent structure.



Summary of 2014

- Continued excellent attendance and support. We now have regular attendees from 17 organisations, with attendance from ONR as required.
- Fundamentals and Practitioner standards completed. We have developed and delivered robust Fundamentals and Practitioner standards that define the scope of the training required for all workers and for Human Performance Practitioners.
- Continued dialogue with Bury College and Oakridge on HU Training. We continue to work with Bury and Oakridge with regards to delivery of HU training in line with the standards.
- Input into the NSAN Triple Bar Existing Sites revision. We provided input into the review of the NSAN TBES training package from a HU perspective in order to ensure that the message is consistent with the training standards and the Body Of Knowledge.
- Blueprint complete. We have completed the HU Blueprint which defines the workstreams required in order to implement a HU programme.
- Document Approval Process agreed. A process has been put in place within the Forum to ensure the production and approval of documents becomes a structured, timely and less onerous task.
- Non-nuclear attendees and benchmark visit. We welcomed attendees from EDF Coal Operations and performed a benchmark visit on their activities at West Burton Power Station

2015 workstreams

- Human Performance Leaders Training Standard.
- Maturity Matrix for Human Performance Programmes.
- Continued Benchmarking visits.
- Continued collaboration between Organisations for Practitioner courses being run in the UK.
- Sharing of good practice, initiatives and learning via meetings, e-room and benchmarking.

Future meetings

Our Face to Face meetings will be held in March, July and November 2015.

Teleconferences will be held in May and September 2015.

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