

EFCOG HPI Working Group Monthly Conference Call, February 25, 2021

Callers:

- ANL – Susan Baumann
- BNL – Bill Brown
- FNL – David Baird
- Hanford – WRPS – Lloyd Keith
- Hanford – WTP – Page Eaton
- Idaho – David Boyce
- INRO – Bobbi Jo Curley
- LLNL – Christine Kerr, Glenette Alston
- LANL – Mike Petrowski
- NBACC – Suzy Fowler
- ORNL – Chuck Ramsey
- PANTEX – Lauri Minton
- SLAC – Rich Poliak
- SRNS – Daryl Smoldt; Cassie Sistare
- SRR – James Harris
- Y-12 – Carol Ritz; Andy Hobbs

1) Task Team Business

a) Review/Update Tasks and initiatives

- **2021 Annual Plan**

Human Performance		
Activity(s)	Benefit(s)	Deliverable/Key Milestone(s)
21-CAS/HPI: Evaluate Methods for Performing Issue Investigations (HPI TG POC - Rich Poliak)	Assist CAS Task Group to provide Best Practices or Information base for CAS Performing Investigations with consideration of HPI perspectives	See CAS annual plan for details (Joint with CAS Group – CAS group to lead, HPI to support)

Human Performance		
<p>21-1: Develop Best Practice: Using virtual capabilities or options for HPI application (to reduce errors).</p>	<p>This best practice will highlight and demonstrate how virtual technologies (Webex, Zoom, Blue jeans, etc.) may be used to implement HPI practices such as peer checking, management observations, remote collaboration, Emergency response, etc.</p>	<p>Best Practice Issue results by 9/30/2021</p>
<p>21-2: Develop Best Practice: How to develop and utilize a “Portable HPI Lab platform” (parts list, build instructions, scenarios, etc.).</p>	<p>This best practice will highlight and demonstrate how portable devices, videos, computer applications, etc. may be used to demonstrate and practice HPI concepts such as peer checking, independent verification, procedure use and adherence, place keeping, etc.</p>	<p>Best Practice Issue results by 9/30/2021</p>

- **21-CAS/HPI**
 - Rich Poliak reports on the progress of this team
 - Team:
 - Rich Poliak, SLAC
 - Lloyd Keith, WRPS
 - Kim Leffew, CNS
 - Jason Smith, Accelerent Solutions
 - UPDATE:
 - We've essentially finalized the questions we want to ask each lab and we are now identifying people at many of the labs to contact and start gathering data. I'll send you a copy of the final set of questions and the list of names we are contacting.
- **21-1: Develop Best Practice: Using virtual capabilities or options for HPI application (to reduce errors).**
 - Team:
 - Mike Petrowski
 - Joe Lockwood
 - Jason Smith
 - UPDATE:

- **Done** – team concluded, had enough info to put together – sent out for peer review across industry; they provided feedback – the product is done, was distributed, and is being posted to EFCOG website.
 - Item of interest – EFCOG has social media sites – posted announcement that product is avail on EFCOG website
- **21-2: Develop Best Practice: How to develop and utilize a “Portable HPI Lab platform”** (parts list, build instructions, scenarios, etc.).
 - Team:
 - Darryl Smoldt, SRNS
 - Cassie Sistare, SRNS
 - UPDATE:
 - High quality draft developed
 - Started from what Chuck provided
 - Included photos from Lloyd for a virtual escape room
 - Added photos of cart and type of bins recommended for use
 - Next meeting in February
 - Lloyd reported – work has been done at Savannah River – close to being done
 - Daryl – met last on the portable lab on 02/10 will meet again 03/10 – refining that document

David Boyce question – HPI practitioner training (Task 18-1)

- David asked; anything finalized?
- Mike Petrowski – yes, held pilot at Nevada National Security Site – went well – then Covid hit. Until travel restrictions are done and classroom teaching abilities are allowed – *the in-person training is on hold*. NTC has all instructional material – *but on hold for now*.
- NTC (Robin Franke) looking at making an online HP training for DOE. May be available sometime in the future.

b) Announcements

- New members – Andrew Foster from Hanford MSA-ESH. He is the HMIS Safety Program manager.
- Mike Petrowski updated the member POC list – not available on the EFCOG website because of concern over personal contact info, – Removed POC list (emails and phone numbers) and now has a form that will send an email to TT leads requesting to be contacted

- Andy Hobbs has responded separately about our meetings with DOE HQ on proposal to revise DOE standard for causal analysis.

c) **Upcoming Meetings (EFCOG and other HPI meetings)**

- EFCOG ISMS/QA Joint virtual conference will be April 19-22 – will be virtual; large group meeting Monday afternoon, then Tuesday or Wednesday if we need to – have our group meetings; if you want to present or share or network, this is your opportunity – let Mike know and we will start
- NERC/WECC Electric Power Human Performance Improvement Symposium - may have cancelled their live as well(www.WECC.biz www.NERC.ORG) **postponed indefinitely**
- HPRCT Conference (<https://www.hprct.org/>Cancelled their live conference; 2022 June will be in Colorado Springs; 2023 back in Portsmouth VA
- **Webinars: - still the same**
 - Paradygm Human Performance (UK)
 - www.paradigmhp.com
 - Thursdays 2:00 PM **GMT**
 - POC - Teresa Swinton: webinar@paradigmhp.com
 - Registration: <https://www.paradigmhp.com/learning-organisation-webinar>
 - EUCI - Human Performance Community of Practice
 - Hosted by Knowledgevine
 - HP Community of Practice discussions will continue to take place every other Thursday and are free for the HP community to participate. There will be a presentation and discussion by a few select hosts, followed by a question and answer/discussion period for all. We will follow up on the session with a virtual Happy Hour.
 - To join: <https://mailchi.mp/e4274b7f9e84/hpcop>
 - HumanPerformanceCOP@gmail.com
 - HPRCT
 - Monthly Webinars: <https://www.hprct.org/monthly-webinars>
 - Developing a “Virtual Community” <https://www.hprct.org/virtual-community>
 - Virtual Conferences (September 2020) <https://www.hprct.org/virtual-conferences>
 - [Knowledge vine good info – more info from Mike](#)

2) HPI Share

- David Boyce
 - How to respond to mistakes or failures – not a risk assessment or how we determine fault – how do we respond to failure or error.

- Think about those times when you had a failure or made a mistake – any horror stories? Anyone willing to share?
 - James Harris – uses this when he talks to folks – RCT at Rocky /flats - part of first readiness assessments after shutdown.
 - He was primary radiation tech – he did all the things he knew to do and did them properly; failed to communicate to the assessment team; assumption on their part was he had no idea what he was doing; his actions alone caused the RA to fail because their finding was a critical finding radiation program failed to respond correctly; as he explained himself to management so they talked to the assessment lead – they made bad assumptions; he made corrections so his next time to demonstrate ability to respond; he started every statement with “let it be known”
 - Where a lot of us fail organizationally is communications; assumptions on the other end can lead to failures
- Christine – attempted her first learning team (was a failure) – her mistake was inviting a process owner to LT, she had a good relationship with him, and he promised to listen only – material handlers were describing how they move materials into vault; in her gut she knew it was a bad idea; had experienced and inexperienced on the team; when the workers were speaking up, the manager chimed up and said “if you just followed the procedure we wouldn’t have had the issue” which discounted their discussion - - she could have done better at intervening and said “ok, thank you but we are not here to discuss the procedure;” she was really frustrated, but called him later, and talked about her frustrations – he asked why she invited him and what his role was, and she let him know he wouldn’t be invited again because he doesn’t have a role in the LT
- Rich – similar to a procedural issue – technician didn’t follow procedure (I got interrupted here – sorry) response from DOE sponsor said “unacceptable, people are incompetent, don’t allow these people to work on this project again” – he was asked to do investigation – he first thought “not again, someone not following process,” but when he did investigation, discovered there were 9 error precursors associated with the work, and that the technician had never been given the procedure, was asked to do something they had never done before, so he presented the info to the leadership team and sponsor and said the techs were not at fault, they were set up to fail, and we need to apologize to them. SLAC leadership team understood and thanked him; he used the culpability decision flow and error precursors to demonstrate how the worker was set up to fail. He was able to go through the process, explain the error precursors, and they understood.
- David Boyce – 3 emotional stories – emotions are always attached to it. We all have those, and those where we feel like we weren’t given that opportunity to recognize or respond in a timely manner stay with us for a long time; sometimes we have a lesson/story to share but don’t have the right audience.

- How we respond makes a difference; incident recently with LOTO incident where paperwork wasn't done correctly it was easy to think "it's only paperwork" but when we think about how a person responds, people have gone to silence because they're worried about the punishment; he likes the idea that if we don't correct things by punishment or hollering or saying things louder – have you seen some positives to how people respond to failure and how did we learn
 - Rich – at SLAC, delivering one of the CROWN modules from Fermilab – early in the learning process; had gone through a number of trials and errors; on site, they had to back a tractor trailer – a CROWN module is about 40' long and a million dollars, takes a year to make; driver backing unit in drove it off the road and got stuck; site management was offsite for a working meeting; deputy lab director (who could be emotional) everyone thought they were going to get yelled at when he showed up; instead, he was smiling, visiting with those on the scene, asking questions, trying to understand what went wrong, etc., and it turned out to be a more positive experience, but he was listening instead of admonishing
- David – great example – when something goes wrong, we will have a tool in our hand one way or the other – either a flashlight or a hammer – a flashlight helps us shine more light on issues instead of beating them to a pulp with a hammer; if we look at current values, we are more likely to find the issue
- One more thing – when we look at human behavior, there is one time when a person is really vulnerable – when they care deeply about a subject, when they are uncertain, and how they receive feedback (negative or positive feedback) – if you're uncertain and you care about a subject and you give positive feedback, the response improves actions moving forward
 - Rich – one basic thing they teach in management class – positive coaching

3) Roundtable

- ANL
 - Sue Bauman – have had issues with people not seeing signs or too many signs (Covid added signs) little bit of overload; looking at idea or trying to figure out if it's because people aren't on site as much as they're used to, or – with one incident, had a person who is very involved in HPI, enjoys it – manager/leader – when the incident occurred, he got the team together, did a pre-job post-job brief – told them we are NOT blaming the person who walked through the door – what did we do to set them up to fail, and what can we do to make sure this doesn't happen to another person – all saw it as a positive to have a leader setting that example MP asked what the outcome was – did the perspective manager set up work? ANs –worked well for that meeting but went downhill from there, safety incident investigation got involved, had 3 more meetings,

more people involved and so that tone got diminished, but trying to look at the positive for it starting well

- BNL
 - Bill Brown – comments on signs – people who are familiar with hazards often ignore signs; the sign IS the caution tape; people are neither invited or allowed to pass judgement on the signs
- FNL
 - David Baird – also wants to thank all the work on error precursors; added it to Fermilab’s Integrated Management Planning and Control Tool (IMPACT) – has been very helpful in doing pre job briefs and after action reviews; HPI subcommittee continues to meet – looking at lab incidents that were reviewed using HPI principles and asking divisions and sections to really look at root causes and drivers to their error precursors and LOWs (February and March). In April, their HPI Subcommittee plans to get together to talk about possible strategies and lab-wide initiatives to address the root causes and drivers. Mike – in Paradigm webinars, Shane Bush, Moranis, Teresa Swinton, Tony Muschera did a round table discussion – may want to get in touch with Shane Bush to see what Idaho is doing to drive Human Performance – might be a benchmarking opportunity for you. Christine from Livermore – took a group from Livermore to Idaho – got a ton of great ideas – if you can physically get out there, she recommends.
- Hanford – WRPS
 - Lloyd Keith – still teaching some classes; interesting data point – his HPI world is closely aligned with Conduct of Operations; he and another employee are acting as COE coaches at ??? plant – objective to even more closely combine HPI and ConOps; recompeting contract for tank farms – viewed as part of process to getting them all operating together
- Hanford – WTP
 - Page Eaton– able to attend physics-based cause analysis meeting – was awesome! At WTP they teach fact-based causal analysis where you have to have objective based evidence; Dave is trying to dig deeper and tie numbers to things, like how long does it take a person to react, the amount of time it takes something to impact; appreciates the invite and would like more info – “Physics Based Causal Analysis”
- Idaho –
 - David Boyce – promoting HPI by having Shane get audience with Sr leadership once a month for 30 min; new lab director who is open for suggestions on how to integrate HPI – he asked “what could I do to help you” – lead by example – have your own HPI implementation plan – as of Tuesday the lab and asst director have signed off on their own HPI implementation plan – only 3 pieces – but will follow on with others implementation plans as well – exciting to have management leading by example. Have had a couple of online classes on HPI introduction and on guidance document they put together on (short document,

only around 6 pages long) look at HPI tools and when to use, develop plan, etc. Assistant director asked how many leaders have had HPI classes – only a handful after they pulled records; lab director and asst director will be attending this week (online); HPI lead qual has been in effect since 10 months now; 8 qualified leads involved across their site helping do plans, reviews, etc.; upgraded their HPI practitioner and lead qual – both have an annual requal now – three main things they have to do to maintain their qual; we want people who are actively involved; so many years we have been emphasizing the plant-touchers, but now focusing on paper touchers as well.

- N3B Los Alamos
 - Joe Lockwood (Email update): N3B has begun HPI training in the form of 5-1 hour modules with at least a week apart for insight.
- NBACC
 - Suzy Fowler (email update): NBACC just celebrated our 3000th day of continuous operations which is a tremendous feat for a high hazard facility. One of the things we do well is bringing “a flashlight and not a hammer” to investigations. As you know a lot has to go right to keep facilities running, and keeping everyone engaged is always a challenge.
- NREL
 - Bobbi Jo Curley – no updates – appreciates group
- LLNL
 - Christine Kerr –passing around the “asking better questions” info from team – getting good feedback; needs to follow up on some things like if we want to incorporate those into procedures; shared with their working groups and her management and positive feedback; MP – Trish did a lot of work on this so contact her and see if she has any LL to share with you to help
- LANL
 - Mike Petrowski – capital projects org; they stated an HPI working group – had a kickoff meeting in February – batted around a lot of ideas; talk of looking at trends; he asked them if we could talk to people – safety conversation card process already in place – and ask them to talk about human performance when they’re doing those safety conversations – how are you anticipating errors, looking at critical steps; pulled one other question from asking questions differently list of questions – what is going differently today – how do we help people actually see the hazards that are out there - settled on “what is different today” question – might help workers look at things differently
- ORNL
 - Chuck Ramsey – good stuff on discussion earlier in the meeting; at Heifer, started up today for first time since last July; fuel issues; lot of human performance – HP rich; 6 months of calculations and reviews and organizational collaboration; on the day they started up, discovered a wire had not been firmly re-landed after some maintenance on, not a safety channel, but a channel that feeds into their circuits; when Rich and Christine were talking about good ways

people were encouraged to bring forward issues; we experienced a little of that too, people were disappointed after being shut down so long, but we had some positives – working with Causal Analysis expert on some trends in human errors related to human mispositions – got info from Lloyd on Hupert machines – will talk to Daryl and ? on how they got support for buying some of those; the thought that went into creating those Larry Fischer created it – it was designed to incorporate all 19 HP tools in INPO reference manual – so he is hoping the lab or his own management will foot the bill for one of those – he wants to get creative in how to engage knowledge workers on those.

- PANTEX
 - Lauri Minton– the HUCFAM spring event is going to be June 9 & 10; they are teaching a revised HPI for Managers and Supervisors class at Pantex now, and they shamelessly stole Shane Bush’s Perfection game DLA
- SLAC
 - Rich Pollack; the one thing he wants to share from SLAC was the example he gave on the investigation; upcoming meeting in April – will send Mike a separate email.
- SRNS
 - Daryl – their big thing they have going on the portable DLA – going well, at Savannah River – still coming out of a tremendous challenge from Covid – they have struggled more over the past 6 to 8 weeks than over the whole time; continuing HPI efforts to help with that; have gone to virtual meetings when possible – same thing everywhere else is doing; big focus lately is getting HPI principles in front of people as often as they can in videos, emails, meeting info – relying on those principles to help with the Covid response.
- Y-12
 - Andy Hobbs – . Shared update on meetings with DOE HQ on proposal to revise DOE standard for causal analysis. Andy provided DOE with an initial mark-up of DOE-STD-1197-2011 showing changes that could be made to the A3 node of the DOE CAT consistent with published works by experts in the area of human performance. Additional references have also been added.
 - NOTE: HPI TT will only create a SME team, IF DOE CHOOSES TO EDIT.
The HPI SME team will assist DOE in their revision of the document.
 - ⊖ Carol Ritz – Y-12 is going well; got last COVID update today; have really come down on COVID numbers; bussing going well; most at home on quarantine are exposure away from work; rates in her area are going down so project continues to move forward; PBQ does virtual assessments using Skype system. Trained their people virtually and feedback has been good; have gone through a whole cycle on 5 absolutes (HU Tools)that they focus on; even as project has progressed, lessons are being shared and people are learning – the low hanging

fruit isn't as noticeable – the absolutes have been ingrained in people so you don't "see" them as well – so it's harder to prove to management the benefit of HPI – but as people transition on and off the project, people still need to learn and know about HU principles, HU tools and the People-Based Quality Program; as engineers roll off, the historical/tribal knowledge leaves with them—which is a concern.

- ⊖ Wants to thank Lloyd for info on training and including HP in the training group – this team succeeds again in sharing information

Mike asked if anyone had anything else? No replies.

Takeaways on calendar:

- April 19-22, looking for presenters for EFCOG Spring meeting
- Consider first week of June for HUCFAM meeting – nuclear power side of house – they have a lot of good things to share
- March 25 will be the next call