

Please consult the agenda to “synchronise” the chat comments with the presentations.

- 12:08:33 From stevenshorrock To Everyone : FSF paper Learning from All Operations
<https://flightsafety.org/wp-content/uploads/2021/07/Learning-from-All-Operations-FINAL.pdf>
- 12:12:59 From David Slater To Everyone : Is Resiliency Index a leading indicator?
- 12:18:53 From Steve Roesli - SwissALPA To Everyone : I can support the debrief concept. Our company managed to get this established throughout the fleets and I noticed how the pilots become more aware of what might be improved (negative examples) or relied upon (positive examples).
- 12:19:03 From David Slater To Everyone : Is this a culture issue?
- 12:22:38 From Sally To Everyone : I would be interested in hearing more about how to get ‘executive buy-in’ it seems to have parallels with healthcare. Your insights might be able to help those of us that are paddling upstream in healthcare.
- 12:23:29 From Annette Gebauer To Everyone : What is your process how to introduce the debrief practice to the pilots (e.g. working with leadership etc.)
- 12:26:35 From Ida Maria To Everyone : If you had previously measured primarily the negatives, how did you define and identify what "a high performer crew" constituted initially?
- 12:26:55 From Richard Bye To Everyone : I think this is great. How do you overcome the perceived barrier as the debrief as (yet) another thing to do?
- 12:27:10 From Abhijith Balakrishnan To Everyone : Do LIT rides happen on every flight? If not, what is the frequency?
- 12:27:20 From Margriet Bredewold To Everyone : How did AA come to the definition of resilience behaviour as beyond and above SOP? In other words, in an overregulated industry, why the choice for putting SOP central?
- 12:27:48 From Mike Boyle To Everyone : James, do you align the debrief feedback process with machine data streams i.e. reflections and observations with other data streams
- 12:27:59 From Arthur Dijkstra To Everyone : How does LIT inform Flight Operations management (the blunt end) other than training to improve the Performance Conditions?
- 12:29:01 From stevenshorrock To Everyone : Interestingly, briefings before and after shifts used to be commonplace in ATC (especially in former communist countries), until individualised rosters.
- 12:29:20 From Vivek.Quadros To Everyone : Does the debrief process being used map back to processes / procedures in the safety management system?
- 12:29:46 From Annette Gebauer To Everyone : I often experience that those kind of practices are perceived as an assault to pilots/doctors etc. expertise. The challenge is to create a shared understanding that a practice like this is an important part of professionally dealing with risks...
- 12:29:55 From Gitte Furdal Damm To Everyone : Are you experiencing any conflict with the training course development (or the whole safety II thinking) in regards to regulatory audits?
- 12:31:29 From Annette Gebauer To Everyone : It depends on the mental models they are having. They have to have a reflection that their profession is about managing high risk, uncertain & complex contexts...
- 12:34:05 From Annette Gebauer To Everyone : It is also about the time that is build into the work to do it... are the 15-20 min for a debrief are planned in?
- 12:35:45 From Annette Gebauer To Everyone : And in addition: Is management interested in this practice? Are they asking about it?
- 12:36:05 From stevenshorrock To Everyone : Little time for either type with the kinds of production pressure we are seeing now. In ATC, demand for technological features mean that engineers have little to no time allocated to get together. Whenever I get mixed groups (ops, eng) together to reflect on work and ask “How often does this happen?”, the most common answer is “This is the first time”. Learning is largely localised in likeminded groups (directly colleagues).
- 12:36:36 From Vinícius Bigogno-Costa To Everyone : It's interesting to see how you "sell" the idea that a sort of behaviour is good for them, for we know it is important, but as Anette mentioned, maybe

they see their job as something trivial. Also: is there a push to crews to be as quick as possible for the aircraft to be available to another flight?

- 12:38:29 From Steve Roesli - SwissALPA To Everyone : Annette: we only have a 1-2min debrief if all goes well and slightly longer if there are any major items. Maybe this is particular to airline OPS, since we work with SOP and that probably cuts down on the issues we need to address.
- 12:43:08 From James Kwasny To Everyone : At AA, our pilots are scheduled and paid for 15 mins of additional time after block in for debrief on every leg. SO it is built into the system, but not normally accomplished. It has always been seen as an element of normal flying, just not practiced well at our airline. We need to try and market and educate to change that culture.
- 12:43:32 From James Kwasny To Everyone : Different airlines might have different experiences.
- 12:46:37 From James Kwasny To Everyone : Arthur - LIT informs management through normal SMS data inputs monthly. On any topic, LIT is welcome to introduce their data to the discussion for decision making. Sometimes we have pertinent data, sometimes we do not. Sometimes we are the best data stream to help the decision. Generally to date, with a small and limited data pool, we have not been the best stream - but have been able to add an alternate viewpoint and approach to an issue. Quarterly, we report on focus items that were requested by our Line Check Airmen - information they tasked LIT to capture from the line pilots on pertinent issues. That data is always very well received and generates significant discussion.
- 12:50:24 From James Kwasny To Everyone : Gitte - We are not getting much resistance in helping develop the new training course. There was some education required at the very beginning to the major players, but after they understood our process and the data - they have been our biggest advocates. They have wanted more and more data than we currently have as the process has developed. That is encouraging. The real proof will be in how the information is received by the line pilots once the course is in practice. We will update the group next year on that datapoint.
- 12:51:21 From Riccardo Patriarca To Everyone : Hi Liselotte, thanks for sharing your research. Looking at your models, I wonder to which extent was FRAM useful for the problem at hand (it seems you had to deal with a fairly linear process at least looking at the numerosity and type of connections, mainly input/output). Was any other method considered before starting with FRAM (flowcharts, BPMN, etc.)?
- 12:52:34 From Maria Lundahl To Everyone : A reflection Liselotte, I believe in your conclusion about having to translate and make protocols workable in practise. It's like James said in the previous presentation that just following regulations does not make you resilient.
- 12:53:49 From stevenshorrock To Everyone : Another interesting vignettes on med reconciliation (from <https://humanisticsystems.com/2017/01/27/the-archetypes-of-human-work-2-congruence/>)
- 12:54:13 From James Kwasny To Everyone : Executive buy-in has not been as hard as we imagined. We told our healthcare friends yesterday this story: A simple story of clearly showing the difference between WAD and WAI in a well known example in your domain is very powerful. Something even management understands where workers do not follow procedure to accomplish the work. This example can make great headway in marketing, because you can then extrapolate the story to 'We need to understand this difference better between WAD and WAI to develop better policies and procedures.'
- 12:54:49 From Annette Gebauer To Everyone : Thank you for your interesting input. The next interesting question for me would be how to evolve the capability within the organization to better spot on these practical drifts and draw conclusions your did in your research: What processes do we have to improve? What variance in work is allowed/wanted?...
- 12:57:42 From Vivek.Quadros To Everyone : In the research carried out, did the gap between WAD and WAI come down to circumstances / situations or the fact the protocols were not implementable in the first place?
- 12:59:45 From Arthur Dijkstra To Everyone : Using the FRAM gives you also the possible connecting points for possible undesired process deviations /variabilities. A flow chat would not have these points.

- 13:01:02 From Mikkel To Everyone : In hindsight the FRAM method may not have been relevant for this study - but the method may help identifying interconnection which you would not see using other tools.
- 13:02:44 From Riccardo Patriarca To Everyone : yes Arthur and Mikkel, it could one of the reasons for doing so, of course depending on the perspective used while modelling, since per se it is not a valid solution if the analysis is still linear in nature.
- 13:28:59 From Richard Bye To Everyone : No problem....
- 13:49:32 From Annette Gebauer To Everyone : Thank you very much! I think the reflection of the underlying mental models is key and it has to start in the leadership team...
- 13:49:42 From Josué Maia França To Everyone : Federico, please, could you talk more about how your work could analyse organizational elements? Still on this, how can you recognize (or even measure) complexity?
- 13:50:05 From Vivek. Quadros To Everyone : Thank you, Could you elaborate on your finding that there was no view of human factors and the binary view?
- 13:51:02 From Barbara Cristinziani To Everyone : Federico, after the completion of your review, did the company commit to further explore any of the barriers you identified? In other words, what will they do as a result of your research?
- 14:05:46 From Margriet Bredewold To Everyone : Federico, thank you. Having understood that the organisation has a SI mindset and that this poses a challenge for you and your team. In your view, how far has your university/ the organisation you represent developed towards and into SII?
- 14:24:17 From David Slater To Everyone : Hi, do you have any specific issues/questions you'd like us to follow up on in the general discussion?
- 14:30:17 From Ida Maria To Everyone : Riccardo, were the participants "volunteered" by management to download the app or was participation? completely voluntary
- 14:33:12 From Arthur Dijkstra To Everyone : @Ricardo: One of the essential aspects is the actionability for the managers to make interventions based on the analysis your method provided.
- 14:33:55 From Helen Rawlinson To Everyone : @Ida: such a good point :-) and great question about communication
- 14:34:23 From Richard Bye To Everyone : This is really interesting work. I'm interested in the practicalities. What is the benefit of the ontology step? Sounds like a lot of work (on top of the work that's already required to do the FRAM analysis). Does it enable a broader sample of WAD feedback, and will the surveys be used to update the FRAM?
- 14:34:41 From Arthur Dijkstra To Everyone : @Ricardo: Important for the tool used by the enduser (the professional executing the work) is to use language in the tool that these professionals understand.
- 14:46:13 From Jim Marinus To Everyone : Are others seeing existing work that seems to embody the methods of both safety I and safety II?
- 14:46:49 From Jim Marinus To Everyone : For the general discussion
- 14:49:09 From Michael Behm To Everyone : Should data collection be moving to more of an ethnographic approach rather than focus groups and interviews? (for the general discussion)
- 14:53:42 From stevenshorrock To Everyone : Participant observation and discussion are complementary, I'd say. One can't observe history for instance, nor plans, fears, beliefs, assumptions, models of the world, and values. Many of the really important things can't easily be observed, but what can be observed is usually important (and sometimes will trigger discussion on the above, but often not).
- 14:53:53 From patricia.wimmer To Everyone : Is it possible to share the new Whitepaper Charting a new approach or do you have a link?
- 14:54:40 From Michael Behm To Everyone : thank you Steven
- 14:55:11 From James Kwasny To Everyone : The second AA White Paper is posted on the workshop website under our presentation slot in the agenda. You can download it there.

14:55:39 From patricia.wimmer To Everyone : Thank you James

14:58:17 From Abhijith Balakrishnan To Everyone : <https://safetysynthesis.com/onewebmedia/AA%20LIT%20White%20Paper%20II-Advance%20Copy.pdf>

15:00:29 From Ida Maria To Everyone : Thank you!