

Notes on Tripod Analysis

- Systematic approach
- Difficult to do without training or a team
- The version I had did not help with classifying consequences. In particular, the categories for structuring the investigation seemed to avoid a focus on consequences. It was not helpful to organizing the structure of the output. Categories were Technology, environment, organization, but subcategories dealt only with contributing factors. Where to put stuff on the damage to these elements? Sometimes you have to start with damage to understand what happened.
- Was it correct to have lots of latent failures?? Not sure. Answer to this question is maybe not important because you can put as many as you want and if it helps with the analysis then it doesn't harm it.
- However, some latent failures seemed to have a long chain and it was difficult to put the chain in the diagramme. For example, with Buncefield, there was a long chain (with missing links) that led to corporate management failures and a long chain that led to failures in the supplier and installation of equipment. It almost discourages you from making these connections because it is visually clumsy.
- I had to look up possible barriers and why they might have failed individually. Sometimes this required a little research, but it was very helpful. For example, our team indicated a missing barrier of "sprinkler failure" in two locations. In one location, I realized that there should not have been a sprinkler (not good practice) and for the second, I had to assume that there WAS a sprinkler system but it was knocked out by the explosion.
- The guidance indicates that you can do a "partial Tripod data analysis". (Tripod beta tree up to immediate cause only.)

Notes on CAST analysis

- After doing Tripod analysis, CAST analysis seemed easy
- CAST analysis gave much more room to consider and make recommendations for organizational factors
- CAST analysis is practical. It seems no software is required.
- The thought process in regard to feedback loops was very helpful in thinking about recommendations
- But of course, I'm not sure if I did it correctly