Chartered Institute of Ergonomics & Human Factors

EXAMPLE
Log Book Entry

Use a clear title that concisely describes the activity

Estimate how long you spent on the activity between the dates you specify. If it wasn't full time, don't just say it was the number of days between the two dates.

Activity Record No. 1	Activity name: *Human Factors Feasibility Assessment of Mobile Crane Activities*			
Dates from	01/04/2019	**To**	15/08/2019	**Number of days of working time** 40

Area(s) of Professional Competence covered (reference numbers in the checklist e.g. 3.1)

Data Collection and Analysis - 2.3a, 2.3c
Physical capabilities and limitations - 3.1c, 3.2b, 3.2c, 3.2d, 3.2f

Focus on your main competencies. Don't try to cover too many in one log book entry. Concentrate on your strengths.

Summary of activity

This activity was required to investigate the hazards posed by mobile cranes across the site to support a safety justification submission from the Safety Team. I analysed a range of mobile crane tasks for discussion and planning of further project phases.

I used qualitative methods to investigate operational control claims made within the safety justification to provide a measure of feasibility, and whether the Human Error Probability (HEP) is likely to be supported by a more detailed substantiation analysis. I used Human Reliability Assessment methodology to provide a quantitative analysis, captured in a Feasibility Assessment report, submitted to the Safety Team.

Use the first person 'I' to stress your role

Explain all acronyms

Details of personal involvement

- Familiarisation of mobile crane operation was required, as well as assessment of safety measures and engineered safeguards;
- Data collection for qualitative analysis, including stakeholder engagement, operator interviews, workshops, task observation and desktop assessment of lifting procedures and facility processes;
- Quantitative analysis which investigated individual claims made, and compared the outcome to what was submitted in the Safety Justification Report;
- Final report submission including optioneering and potential solutions to reduce the potential for human error.

Explain clearly and concisely what you did

Details of ergonomics/HF involvement

- Task analysis of mobile crane operation during different refit tasks and areas;
- Review of operational experience feedback;
- Review of previous HF reports on similar tasks;
- Assessment of decision making within the planning process;
- Desktop review of administrative controls, operating procedures and deconfliction planning documentation;

- Hierarchical Task Analysis (HTA) representation of task analysis output;
- Human Reliability Analysis (HRA) techniques using Skill / Rules / Knowledge (SRK), and The Technique for Human Error-Rate Prediction (THERP) methodologies;
- Written analysis to validate predicted human error.

If possible, list specific HF tools and methods

Details of professional skills employed
- Using HF methodology to familiarise with several mobile crane tasks and engineered features;
- Utilising HF knowledge to undertake a quantitative assessment;
- Use of Microsoft Visio to produce a graphical representation of findings;
- Stakeholder engagement with both the Safety Team and the Mobile Crane Operating Team.

Outputs of the activity
- An assessment of feasibility for individual operational claims;
- A piece of work which is ready for substantiation phases;
- Where claims were proved unfeasible, recommendations were made to reduce likelihood of human error, and improve overall safety of the situation (such as providing safeguards, independent checks, etc.);
- HFI within a safety justification.

Reflect on what you learned from the activity

Comments on how this activity has benefitted your professional development

This was the first major piece of quantitative assessment which I had used in my career and gave me invaluable technical skills such as HRA. I learned that a good and comprehensive HRA is underpinned by a strong qualitative basis. It was important to talk to the operators themselves to gain a first-hand insight into some of the claims, however it was also important to remain as objective as possible throughout analysis.

Supporting evidence (include filename)

Crane report v1

Choose the best evidence you have to support the competencies you're claiming in the log book entry. If a report has multiple authors, ensure it's clear how you contributed to the report.

Make it easy for the assessors to find the evidence within your work. Don't submit an entire thesis if only one chapter provides the evidence; just submit that chapter.