



## Our Services: Control Room Health Check

### Summary

Human Factors Applications can evaluate your existing control room, identifying any risks. From this we can provide a detailed improvement plan to promote operator vigilance, alertness and wellbeing.

### Our Services

Our extensive applied experience in the development & implementation of safety-critical control environments (across industries) provides us with a unique capability in the assessment of existing control rooms.

This holistic review typically includes:

- **Acoustics** – identifying any distracting noise sources (*radios, attenuators, speakers, vibration-borne noise, reverberations etc.*) that can reduce an operator's effectiveness;
- **Alarm management** –to ensure that operated systems are managed effectively;
- **Communications** – identifying important sources including CCTV, procedures and manuals to manage effective shift handover and transfer-of-information;
- **Desking and Seating** – ergonomic assessment to ensure provided seating is sound and fit-for-purpose in 24/7 operations;
- **Human Machine Interface (HMI) design** and its effects on operator Situational Awareness & workload;
- **HVAC** – review of the air quality / air changes, fresh air make up, distribution and flows throughout the room(s) to assess its effects on operator alertness;
- **Lighting** – systematic review of lighting quality, uniformity, glare, its control & maintenance to promote alertness and wellbeing;
- **Operational layout** – functional adjacency of equipment, sight-lines, display technologies used and console physical arrangements to promote effective teamwork;
- **Permit control** – hazard analysis, workflows & communication, to ensure adequate Situational Awareness among personnel;
- **Security** – controlling access effectively, to avoid operator distraction;
- **Workload** – roles, responsibilities and job design to avoid operator underload / overload.

Each of these aspects are evaluated and assessed for their impacts on **operational performance** in the control room. By implementing the recommended practical actions, OPEX savings may be realized, and the likelihood for human error reduced.

