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| **Screens, displays, controls and actuators** | Controls work in unexpected ways  Controls that were hard to figure out  Controls that were too far away from devices  Controls that were too easy to activate accidentally  Controls with ambiguous or unintuitive labels  Controls that were too similar to each other  Indicators do not show the control has been activated  Unexpected placement of controls  Users didn’t receive feedback for actions they made on the interface  Users were not able to easily reverse their actions | The design process of screens etc. wasn’t based on ISO or other HF principles for human interaction with displays and control actuators, to minimize operator errors and to ensure an efficient interaction between the operator and the equipment.  Engineers responsible for the design didn’t have competency in HF in design.  The contractors, suppliers and their sub-contractors didn’t have HF design requirements integrated into their design processes. | Engineers responsible for design, assembly, refurbishment of the equipment  Suppliers responsible for design to determine how they integrated HF design industry standards into their processes and competency  Other operators using the displays and controls. | Engineering documents, blue prints, policies demonstrating requirements underpinning design.  Ask a new operator to walk you through how they would use the controls and what they find confusing. People who are performing the task on regular basis are more easily articulate the usability challenges | ISO 9355  — Part 1: Human interactions with displays and control actuators  — Part 2: Displays  — Part 3: Control actuators  — Part 4: Location and arrangement of displays and control actuators |
| **Team work** | Team member didn’t anticipate the needs of team members.  Team member didn’t provide timely support to team members without needing to be asked.  Team member didn’t recognize when team members were having difficulty.  Team member didn’t check common understanding of the objectives of a task.  Team members didn’t act to avoid or resolve potential situations of conflict.  Team member focused on what is right, rather than who is right. | There were no efforts to build an effective team focusing on trust, communication techniques and mutual care. |  |  | IOGP Guide Introducing behavioural markers of non-technical skills in oil and gas operations |
| **Fatigue** | Person had more than 10h rest in 24h before incident  Stress or worry that could interfere with sleep?  High workload or physically arduous work completed  The individual working nights for > 4 consecutive nights  Overtime or double shift taken  It was the first night on night shift  The incident took place between 02:00 and 06:00 or 15:00 and 17:00  Tasks involving long period of concentration or mental demand  Others observed fatigue-related behaviors  People didn’t have a good understanding of fatigue symptoms | Fatigue risk management arrangements weren’t informed through risk assessment  The management of fatigue wasn’t integrated into the safety management system  Clear rules weren’t established for maximum working hours, minimum rest periods, split shifts and changes to expected shift (e.g. last-minute change from day to night shift)  Consideration wasn’t given to the effects of mobilisation and demobilisation on both process and personal safety  There weren’t processes for employees to self-report fatigue and for dealing with individuals who may be suffering from the effects of fatigue e.g. assessment and remedial action  Key Performance Indicators and/or audits weren’t used to monitor and review the effectiveness of the fatigue management arrangements  Fatigue risk management awareness training wasn’t provided for those with responsibilities for managing fatigue, including the workforce | Supervisor – to determine typical working patterns  Planner – to determine the demands on working time  Site manager – to determine the availability of manpower resources  Medic or health advisor – to determine approaches to managing fatigue | Review any fatigue risk assessments. Do they consider important fatigue risk factors such as shift design, hours of work, overtime and callouts, sleep environment (especially for nightshift workers), delays to mobilisation and demobilisation, effects of medication.  Review the fatigue risk management arrangements. Is fatigue formally managed, are clear rules established for maximum working hours, minimum rest periods, split shifts and changes to expected shift (e.g. last-minute change from day to night shift).  Review any monitoring data such as overtime and call out records. Can any issues be identified such as excessive overtime or repeated last-minute swing shifts?  Inspect the sleeping arrangements for nightshift workers.  Discuss how fatigue is managed with important personnel (CRO, Production Operators, Medic, Supervisors and OIM). Do they have a good understanding of fatigue risk? Are fatigue management arrangements implemented effectively? Do they receive any formal training on how to manage fatigue? | BPs guide to identifying fatigue contributing to incidents  Investigating fatigue in incidents tool |
| Ambient Environment | The amount of light available made it more difficult to perform this task  The noise level made it more difficult to perform this task  The air temperature made it more difficult to perform this task | Resources for heating / Air conditioning, lighting, equipment generating noise | Facilities manager AND  Site manager responsible for the budget and planning of facility conditions |  |  |