



## How good is your business really?

### **Trusting employees: scheduled based working at BAE Systems Maritime - Naval Ships**

BAE Systems' Maritime - Naval Ships business has faced an increasing challenge in recent years to both reduce its cost base and improve the quality and capability of its products. This comes as its major client, the Ministry of Defence, has sought to deal with the consequences of a greatly reduced procurement budget and political pressure to deliver more for less.

The company has recognised that to deliver the improvements in productivity to meet the customer demand, a fundamental culture change away from a traditional manufacturing and delivery model is needed, towards one that puts modern employment practices, and the commitment and ingenuity of all its workforce at the centre of its operation.

A highly engaged workforce is a precondition for the kind of culture change the company was seeking, but is not sufficient in and of itself. Looking at evidence from high end manufacturing, it became clear that the key ingredient in delivering the performance improvements being sought was unlocking the capacity of the workforce itself to develop and own the changes – to unleash the skills and motivation of front line staff to deliver the improvements in both processes and efficiency that were required.

Traditionally, the Naval Ships business operated a plethora of inflexible agreements, rules and governing arrangements, and traditional practices that the company



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recognised were not aligned to either a productivity or high performance agenda, or an 'employer of choice' philosophy. 'Pride in the past was impeding future change,' according to a senior manager. A strong and representative union presence worked to safeguard practices which were seen as valuable for employees, and as integral to the 'unwritten contract' with staff.

Evidence from the company's employee opinion surveys suggested that the traditional way of working within the two yards (Scotstoun and Govan), had led to a disengaged workforce, that did not feel comfortable with change, had varying levels of trust in senior leaders and managers, did not feel recognised or valued for the work they did, and felt that honest, two way communications within the company was poor.

The Scotstoun and Govan shipyards are currently building three offshore patrol vessels (OPVs) under contract to the MoD. This programme was recognised as a key enabler to introducing and demonstrating the effectiveness of business change initiatives in increasing productivity and maximising efficiency and in doing so reducing the potential cost of future programmes. In particular, the inevitable delays that would occur in programmes, as design, planning, material delivery and other issues were ironed out 'on the job', needed to be handled and overcome in a different way, so as to minimise their impact and enable the overall delivery time table to be maintained. This demonstration of more effective performance would be critical in BAE Systems' bid to secure the design and build contract for thirteen state-of-the-art Type 26 Frigates, a major contract which would ensure the long term future of the yards and the workforce.



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### The schedule based working project

Under schedule based working (SBW), outputs – i.e. delivery of the product to a specified schedule – are measured, as opposed to inputs – i.e. number of hours worked. The aim of SBW is to empower teams to work flexibly and to self-determine how their stretching weekly workload is delivered; it also incentivises innovation, since if the team can find innovative solutions and process improvements within the overall quality framework, this enables them to complete the schedule faster and so benefit through a shorter working week. It gives teams the autonomy, empowerment and capability to determine improvements in their working environment, to generate and implement ideas and improvements and to have complete ownership and flexibility over the hours they work and the way in which they ensure the schedule is delivered.

Through this empowerment, motivated and developed employees drive waste and inefficiencies out of the working environment, identify process improvement opportunities and create a culture of co-operation and team work that rewards the team for their level of output, rather than their attendance, thus aligning the incentive for the individual (reward) with the objectives of the company (performance).

Clearly such a fundamental change has major ramifications for job roles and working arrangements not just for the front line team members, but also for first line supervisors and their managers and leaders, who need new skills to manage and ensure delivery in this environment. “It’s a fundamental move away from a command and control instructional style, where the management hierarchy treats the front line



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staff as children, to one based on enabling, support and coaching” explained a supervisor.

For more senior managers, in operations but also in the delivery and support functions such as engineering, planning, supply and logistics, SBW demands new ways of ensuring accountability for the production of outputs. Fundamentally, this style of management is based on trust, clarity of roles and responsibilities and expectations, and effective working together across separate functions. In fact, as the ramifications of introducing SBW became clear, on-site leaders recognised an overall site-wide cultural change was needed, which would see all the managerial levels of all the functions working together in a different way with the sole focus of enabling front line employees to deliver.

### Introducing SBW

A fundamental change in working arrangements embodied in SBW could not be brought in overnight. It was vital to have the support of senior managers in all the relevant functions that would be impacted – operations, supply, engineering and so on. Neither could it be imposed on employees, since its success was conditional on their owning the new way of working. And the production requirements of different work units – demands on product throughput, shift patterns, etc. – meant that while the principle of measuring output rather than input would remain constant, the actual working patterns resulting would be different – no one size would fit all.

Discussions therefore began with all relevant stakeholders in Scotstoun, and in particular with the trade union convenors over an eighteen month period, with a view



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to bringing in a pilot SBW project firstly in the Scotstoun pipe shop (which had some experience of LEAN techniques) then in the sheet metal shop, since these were relatively self-contained (though vital) operational units. This early discussion with the union convenors, and the commitment to pilot the project, were vital in gaining the confidence and the support of the workforce concerned and fundamental to its success.

The unions (Unite and GMB) in Maritime - Naval Ships have a strong tradition of working positively with the company to secure the future of the shipyards. "Building ships runs through the lifeblood of the Clyde. But we know the business is changing, and the pressures to cut costs because of overseas competition and the demands of the MoD. Our deep concern is to preserve this business so our children and grandchildren can have a future here" explained Scotstoun convenor Duncan McPhee.

With the trade union agreement, an intensive programme of preparation of the pipe shop work employees for SBW was undertaken, including an off-site day at the St Mirren football ground, enabling a deep understanding of the principles and practices – and what people could expect. Discussions were 'robust and penetrating', with employees pushing for full exploration of the implications of what was being proposed. This programme of preparation has been the benchmark employed across all subsequent pilots.

First line managers and supervisors, several of whom had already attended courses run by the in-house LEAN learning academy, were similarly supported in



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understanding their new roles, in supporting and coaching teams and individuals in performance, and in moving away from a 'command and control' style to one of setting clear goals, assisting problem solving for the team and ensuring regular feedback.

Employees from support functions who were directly supporting the pilot areas were included in the preparation, including detailed planning, maintenance, quality coaching, supply chain, human resources and engineering.

Equally critical was the unambiguous support for developing and trialling SBW from senior leaders in Maritime - Naval Ships, who sent a clear message that the project was seen as integral both to the cultural change that was desired, but also to achieving the savings needed.

### Outcome

Since October 2013 schedule based working has been progressively rolled out as a series of pilots across the three manufacturing shops in the Scotstoun facility and in two areas of the Fabrication facility in Govan. The plan is to introduce these working arrangements across all of the Fabrication facility in 2016 and then progressively through the rest of the Govan Production facilities.

The impact of introducing this new way of working has been significant with benefits being realised both by the company and also by the employees involved. For example, SBW has been the driver of an unprecedented increase in productivity across the pilot areas. These increases result from the required schedule being



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based upon a 17 per cent performance improvement target when compared with pre-pilot performance levels. In the Pipe Shop facility this level of output increase has been achieved every week since October 2013 without the team ever needing to complete a full 37 hour week.

Perhaps of more significance however is that this productivity improvement has been supported by evidence of significant behavioural change, demonstrating an increase in discretionary effort and employee motivation. The examples are numerous but include the team willingly approaching each other to agree how they can support the delivery of each other's activities, self-regulation within the team with regards to poor performance or poor attendance, experienced team members supporting development of apprentices by giving up their own time in spite of the weekly targets being completed as well as the generation of continuous improvement ideas and innovations allowing for improved process efficiency.

This way of working gives the employees within the business more trust, empowerment and autonomy than has ever been given before. They have control over their working environment and more importantly their work life balance.

There is clear evidence, both anecdotal and data driven, that trust between the team members and the management has significantly improved. This has been demonstrated through the team taking ownership to determine who amongst them works extra hours to complete the schedule in order to allow others to finish the working week early, and the team (not just management) challenging the efficiency



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and processes of supporting areas to ensure the drumbeat of productivity is maintained.

The areas in which schedule based working has been embedded have also seen a significant change in leadership styles where the operator becomes the focal point of the structure, facilitating his/her effective operation becomes the priority, and the leadership style is characterised as that of coaching and mentoring as opposed to traditional command and control. This approach enables those closest to the task to become more empowered and responsible for making the decisions that best effect the successful completion of the task.

### Learnings

- There is strong underlying belief – which is growing across the business as more and more employees and managers become aware of the potential of SBW – that BAE Systems employees have the solution to many productivity challenges and the key task of the overall operation is to unleash this potential and creativity through empowering and trusting the workforce
- Critical to its successful implementation at Scotstoun was the period spent discussing the possible introduction of SBW as a pilot in clearly defined areas of the business with the trade unions, and then with the employees themselves - answering questions, developing joint solutions and ensuring all parties understood that the project was a pilot
- Following agreement on the shape of the pilot, the effective induction of team members into SBW before the programme started was similarly vital



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- The ability of first and second line managers to support teams in SBW ways of working specifically, and not just a broad understanding of effective people management, has been critical to its success
- The effective bringing together of functions including engineering, manufacturing, supply, logistics and planning to ensure the right flow of materials has similarly been crucial
- A communal determination to break down traditional silos between departments and function to ensure that the focus is on enabling the front line to deliver
- Support from the leadership at all levels for the new way of working has underpinned its success - and this sustained support will be the critical determinant of the future successful roll out of SBW
- Rolling out the new way of working to the Govan site has necessitated the same strategies for successful introduction, ensuring that employees and managers do not feel the new way of working is being imposed on them, but have a sense of ownership and real input, the new way of working. It is also requiring new ways of co-ordinating functions on a daily basis
- There is therefore no predetermined template for introducing this way of working. The principles of mutual benefit, clear outputs, joint problem solving in a trust based culture, and the changes in management style needed will be common, but the key to successful front line empowerment is development and ownership, by and commitment from, all the stakeholders