Behavioural Safety Assessment

A report of an on-site assessment carried out at on the *Osprey* offshore platform for MOGC UK Ltd (a multinational oil and gas company) (Oct 04)

Contents

Executive Summary

- A 3-day visit was made to the Osprey platform (operated by MOGC UK Ltd) during October 2004 to conduct a "behavioural assessment" following concerns raised about recent safety incidents.

- OSPREY was found to have a strong safety culture with a focused management and crew and to have had a generally very good safety performance over the past 6 years.

- Practice on the platform is relatively "leading-edge" and as such there are unlikely to be any *text-book answers* to be had in the search for further performance gains and sustained improvement

- It proved difficult from the available data to come to any firm conclusions regarding any deterioration in safety effort or any explanations relating the incidents that have occurred during 2004.

- It was deduced however that the incidents could be predicted from the risks being identified through audit and observation and that there is room for improvement through adopting a keener focus on improving behaviour.

- In order to pursue this there is a need to devise a more sensitive means to measure performance with the emphasis being on the actual measurement of risk levels rather than on the activities designed to manage and reduce risk taking.

- In addition, it was felt that there is a need to challenge the existing logic in which the management of safety is conducted mainly through a focus on the continued raising awareness of potential and actual risks and the required behaviours.

- Instead, there needs to be more emphasis placed on motivation as a key issue in determining improved performance – doing more of the same is unlikely to bring further gains, management and crew already have very good safety attitudes and knowledge.

- Linked with this there is a need to consider morale issues and the possible negative effects that increased control measures can have on performance.

- Other important issues concern the need for more leadership challenge, the need to develop a more integrated behavioural strategy, the positioning of "just culture", a sense of an increasing division between MOGC and contractor personnel, focus on local team performance and recognition, and the evaluation of existing tools and techniques to determine relative impact on actual performance.

Background

OSPREY is a relatively new platform with good welfare facilities and as such is an asset that people on the whole enjoy working on. These aspects have probably had some influence in providing the basis for the development of the generally positive culture that was in evidence during the visit. It is perhaps easier to think positively about safety when the environment you work reflects a sense of caring about your needs.

The platform has a very good performance history reflected in the fact that at least 6 years has elapsed since the last LTA. People feel good about this performance and in this regard there is some irritation surrounding the occurrence and reaction to the number of incidents that have happened in 2004. SHE performance is measured in terms of a number of key outputs and inputs. The platform has met all of its input targets but by the time of the visit the various annual output targets had already been exceeded. Particular concern surrounds the High Potential that occurred this year.

The purpose of the visit was to explore the issues that might be associated with what could be construed as deteriorating performance and in particular to identify actions that would help OSPREY in creating a situation of greater assurance with regard to SHE performance.

Doing more of the same may not bring improvement. Furthermore there are unlikely to be simple explanations or solutions that no one has yet thought of. In view of this, we have chosen to adopt a challenging approach in writing this report. The background to this is the need to develop new thinking in the context of achieving further gains in safety performance when the starting point is already extremely good - though not good enough and given recent incidents not assured.

The data and observations, upon which the report is based, were collected through a variety of means during a two-day offshore visit conducted during October 2004. The

activity was not designed to be a thorough audit. In view of this, the points that follow should be regarded as observations and comment to provoke further debate and interest rather than absolute certainties.

In the report we make reference to a number of technical terms that are used within behavioural science. In particular we refer to concepts that are associated with Reinforcement Theory (RT). RT is a theory of motivation and provides the basis through which patterns of behaviour can be explained. As such, RT features in many approaches to behavioural safety and the associated *ABC model* is generally well known to those involved in its practise. In the context of the OSPREY platform for example, the ABC model lies behind some of the thinking upon which the STOP system is based.

In the ABC model, the A refers to *antecedents*, the B to *behaviour*, and the C stands for *consequences*. The theory asserts that both antecedents (events that serve as behavioural prompts or triggers and come before the behaviour) and consequences (the outcomes that follow from behaviour) operate to influence how we behave. Of particular significance however is the consistent finding that it is consequences that have the most significant impact on our choice of behaviour. Antecedents in contrast are relatively weak and yet much of the effort that is exerted to influence safe behaviour is antecedent in type.

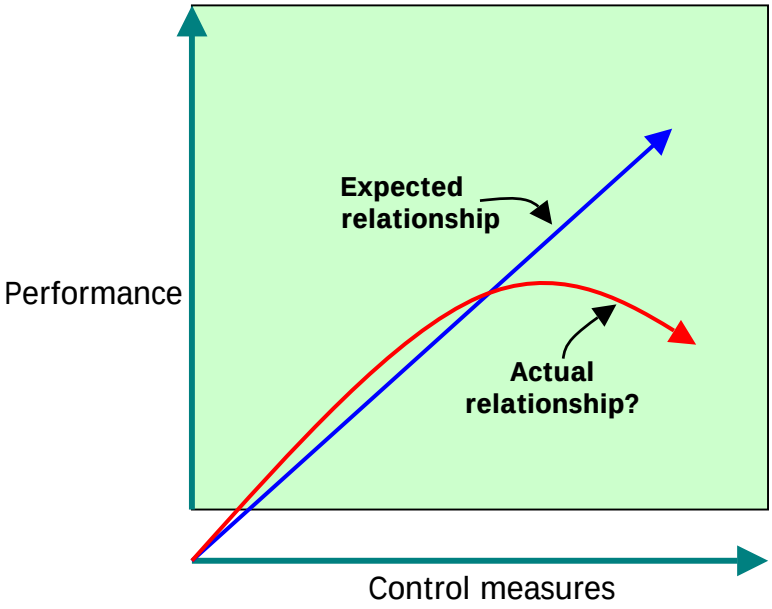
Key Observations

Generally strong safety culture

As indicated above, the overall impression was that of a generally positive safety culture. Safety has high visibility and a majority of the workforce appear to accept that safety is indeed a priority. There are however perhaps two factors that could have an impact on whether the platform is able to maintain this positive culture.

The first of these concerns the perception that the "OSPREY Team" is a concept that is diminishing, and that the team is now dividing into MOGC and contractors with the associated development of a different relationship. The second relates to the perceived manner in which the recent incidents have been investigated and, accompanying this, the perception of more and more "bureaucracy" being introduced in relation to safety. Associated with this has been the increased emphasis on a "just culture" approach, which appears to be perceived by at least some of the workforce as "negative pressure".

Of course, a tension exists between the apparent need to exert increasing control when incidents occur versus a sense of taking away individual responsibility and the implied challenge to people's competency. What this suggests is that the relationship between control and performance is not a linear one, but one in which there may well come a point when a sense of over-control leads to diminishing responsibility and even diminishing effort and performance. Consider the following graph:



This is presented as a tentative theory rather than an explanation. However the views expressed by some senior crew-members suggested that such a theory needs careful consideration. For example, one such member suggested that safety procedures were reaching a position in which they are "close to being unworkable with too much emphasis on paperwork".

Good practice and performance overall but room for further improvement

The performance record as noted above is good and people on the platform appear proud to be associated with it – so much so that there is a sense of some considerable disappointment at the incidents that have occurred this year. However, whilst there is a general recognition of the need to do better, and also that there is room for further improvement, what does seem to be lacking is a sense of urgency or passion that is probably required if the platform is to further improve from what is already a very good level of performance.

In addition to this point, it is also evident that practice is not always as good as it could be. For example, the various audits that are undertaken have identified

instances of non-conformance with the safe systems of work (some of which we understand to be potentially serious), and other observational tools report examples of unnecessary risk taking. The challenge the platform faces is how to eradicate these risk factors in a culture where the feeling at least in some seems to be one of "safety saturation". This suggests that simply doing more of the same may not make the difference required.

Difficult to establish from data whether recent incidents reflect a diminishing of the safety effort

The small number of incidents that have occurred this year (six) are rightly a cause for some concern given the experience of the people injured, the high expectations of the company, the business unit and the platform and, in two cases , the potentiality associated with the incidents. However, even given the thorough analysis that such incidents are subject to, it is difficult to identify trends or common causation with any degree of reliability. Furthermore, it is difficult to substantiate whether the incidents reflect any deterioration in the safety effort.

Given the results obtained from the various audit and observation activities, it seems appropriate to predict that there could be times when these risk factors will result in the occurrence of an incident. What is difficult to predict with any degree of certainty is when the incidents are likely to occur. It seems quite possible that the crew on the platform have maintained their high standards with respect to the safety effort. The problem may therefore, **not** that the level of effort and attention has diminished, but that the level attained has not been high enough in the first place. In short, there remains more to be done and as we have already said this may not be achieved through simply doing more of the same. In short, the incidents may be more symptomatic of an **incomplete strategy** rather than a lowering in standards or effort.

Current measures unable to depict performance variance reliably – could result in erroneous conclusions

The above analysis suggests we need to be very careful in drawing conclusions on the basis of what is limited data. A significant problem lies in the nature of the measures themselves and their general inability to provide a reliable picture as to the level of risk and risk taking on the platform. This represents a significant challenge to any organisation that has achieved such high levels of safety performance as measured in terms of output data.

Given that the various input measures are measures of activity rather than measures of actual risk, they are perhaps not as helpful as they could be. For example, the platform places emphasis on the number of audits carried out against target and displays the result as an indicator of safety performance. What is not reported is whether these audits are revealing **more** or **less** risk / risk taking. The same argument is true with respect to most if not all of the input measures (permit audits, Management Safety Tours, STOP cards).

Although it is a complex challenge to develop such activities so that they can provide reliable measures of risk and risk taking, taking on this challenge is required if the platform is to achieve better intelligence with respect to its management of safety. The current situation raises the possibility of erroneous decisions being made because the data lacks the level of veracity required. This is evident on the platform in the case of some key and valued personnel who feel somewhat "beaten-up" as a result of the reaction to the various incidents. Despite that they feel that they have consistently devoted a lot of time and care with respect to the safety effort. The danger is that they may become less well motivated and this might result in a diminishing focus.

Difficult to identify specific issues from existing data base that would explain recent events

The search for a causal relationship is key in improving safety management. Unfortunately, when people and behaviour are involved establishing causation is difficult and as a result there is a danger that unsubstantiated theories of explanation may result. As human beings we are prone to producing unsubstantiated attributions in which we link variables that already exist within our fields of vision in a cause and effect way. For example, the recent incidents experienced on OSPREY have coincided with an increased number of "green hats" on the platform. In addition, there is a view that the crew is an "ageing" one and that this might explain what has been experienced.

Great care needs to be undertaken in assuming the validity of these theories without subjecting them to some form of test. Of course this is extremely difficult in the context of an offshore platform. A further hypothesis raised above questions whether the data is in fact a product of a changing environment or whether it reflects the non-linear pattern we often see when measuring human performance over a relatively short period. What this all suggests is the need for a more rigorous approach in the search for the variables that predict performance. Given that the type of theories stated above imply that certain attributes are associated with different behaviour patterns, which in turn reflect increased risk taking and increased probability of incidents, it is the differences in behaviour that we ought to be focusing on.

The danger is that we instead end up generating hypotheses that seem valid at face value but which may not be valid at all when subject to careful enquiry (eg more incidents, more green hats, more green hats therefore cause incidents). Such linkages may have high "common sense" attraction but they may not provide the full or even best answer to the problem. If the aim is to take safety to new heights, the requirement is to become more rigorous in identifying the important independent variables. For example, it may not be the green hats themselves that are the problem, but the effect

that such new people have on other members of the crew. This explanation has lesser face validity but there many examples in history in which the much less obvious explanation is eventually proved to be the most appropriate one. (Here we are not saying that the increased incidence of green hats is not a contributory factor, but that there is a need to explore this hypothesis rather than accept it at face value because it seems to make "common sense").

New initiatives tend to reflect "more of the same" logic - unlikely to generate improvement sought

Like other platforms, OSPREY continues to search for new ways to improve safety performance and its associated safety culture. Some of this emphasis serves to maintain interest through the introduction of new initiatives. This reflects the fact that safety as a subject is of relatively low interest value to many people until things go wrong. New initiatives serve to keep some focus but also tend to generate feelings in people of initiative weariness. As initiatives are rolled-out but there is little evidence of the sustained improvement sought, they fall into decline or are replaced by something "new". Unfortunately, the new approach is often based on the same or similar logic to previous attempts and the outcome typically is the same result.

This is a generalised statement but one that needs some consideration. In the context of the OSPREY platform, the major emphasis appears to upon achieving influence through *antecedent* management. This is reflected in the variety of ways that people are reminded of their responsibilities and the need to manage safety. This type of approach has a significant role to play in promoting the safety agenda. However, such an approach needs to be complemented by some emphasis on the management of consequences and specific accountabilities.

The evidence however is that on OSPREY there is less emphasis of managing the consequences associated with safety behaviour, effort and performance. One exception is the use of the STOP process to commend observed acts – over 50% of

STOP cards collected in a recent period were commendations. The existence of a budget to provide individuals with some monetary reward has been operated but seems to have lacked rigour in terms of the connection between the reward and the behaviours being rewarded and the focus has been on a few individuals rather than on team effort and performance. The result has been much less impact than could be achieved through a more systematic approach.

There is an implied need here for those in significant positions to take greater interest in how consequence management can more effectively drive the right behaviours, compared with the existing strategy based on tell, tell again and keep on telling. Research tells us that an antecedent based strategy is likely to have relatively limited effect on people's behaviour. Indeed, overemphasising the use of antecedents can lead people to "switch off". Unfortunately, managing behaviour through the use of antecedents is attractive in that it is relatively simple to find more and more ways of telling or indicating to people what they should be doing.

Lack of hypothesis generation and testing to aid improvement – need to develop "action research" bias

Linked with the above, the intervention emphasis seems to be on the production of good ideas rather than on a more direct and explicit emphasis on identifying and testing hypotheses. Rather than develop more generalised approaches to the problem, it is suggested that some consideration be given to adding in a more "action research" bias as follows:

- Identification of problem
- Data collection to quantify the problem
- Development of hypothesis (linking of variables in a *what is causing what* way)
- Formulation of an intervention plan to change the relationship between the independent variable and the dependent variable, and success criteria

- Implementation of action plan
- Data collection to evaluate success
- Generalisation of action plan features if successful

The use of this action research methodology does not have to be large scale. Instead it probably makes more sense to conduct some "mini-experiments" so as to manage the risk. The emphasis in this should be on new thinking and controlled experimentation. Once more, the underlying argument is that just doing more of the same may not generate the difference sought. As we have already stated, practice on the platform is relatively "leading-edge" and as such there are no more text-book answers to be had in the search for further performance gains and sustained improvement.

One idea to be considered in this context is the development of more local responsibility for the management of safety to **functional teams** specifying that they must

- conform to certain minimum principles
- must make clear how they will manage safety
- must identify how they will measure success
- must invite outsiders to evaluate their success and
- be prepared to relinquish control if the measures / evaluation are not positive

The theory behind such a strategy lies in giving people greater responsibility and ownership. On the platform there was some evidence of this in the form of the planning and target setting adopted by the operations teams. However, there is scope to further develop this and to extend the focus to other functional teams / contractor

groups on the platform (although this is more problematic given how the crew changes operate.

Behaviour and motivation are issues that have not been fully explored

We have already made reference to the emphasis of placed on managing through the use of antecedents and the relative lack of emphasis on influencing behaviour through more systematic consequence management. Also in this context are the comments made with respect to "safety saturation" and initiative weariness, and a sense of compliance rather than passion. The nature of the work on a platform is (for some) repetitive and may not in itself be intrinsically rewarding. Furthermore, given that safety success typically is measured through the absence of anything untoward happening, and that the various input measures are activity based rather than focused on improved risk management, then motivation ought to be a variable that attracts our interest.

In the case of those with positions of responsibility motivation around safety appears to derive from a mix of internalised positive attitude (safety held to be very important) and of external accountability for performance (largely framed in terms of an absence of incidents and the consequences that would flow if these occurred). The problem lies in the fact that a few incidents have led some to feelings that all the effort they have put in to safety becomes less significant and less recognised and as such this could affect levels of motivation and drive the wrong behaviours down the line.

This effect is exacerbated through the pressure contractor organisations are exposed to given the explicit linkage that has been made between safety performance and future business contracts. In behavioural terms, the emphasis in this is on managing behaviour through "negative reinforcement" (or threat). This strategy does not bring out the best in people and whilst it is a top level strategy that has significance for the business the intent gets passed down the line and the outcome can be counter-

productive. The challenge here is to design and adopt a more positive approach that focuses upon:

- Value-adding safety inputs (behaviours)
- Systematic consequence management such that effort and achievement produce valued outcomes for those involved

Unfortunately the reality is that whilst many people espouse positive attitudes and beliefs about safety (after all, no one wants to get hurt), this does not carry through into their motivation to always do a job "safely" (I can take short cuts, avoid effort but not get hurt). The challenge therefore is to motivate people so that they increasingly select the safe behaviour rather than place the emphasis on improving attitude (attitude generally is not the problem). In the context of the OSPREY incidents, it is possible to imagine that such a lack of motivation may have been a factor although this would be difficult for people to admit to and so explanations such as "miscalculation" or "lack of concentration" feature when such events are investigated when "took short cut" or "chose not to follow best practice" *may* be the reality.

Evidence for this was seen on the platform in the form of some instances of unnecessary risk taking. For example, a person was encountered not wearing eye protection. His reaction when he realised he was being watched was to quickly pull down his eye protection. There may be a fine line to be drawn in such situations between choosing to ignore the standard and forgetting. In either case, the challenge can still be seen to be a motivation one – would the person have forgotten if the consequence had been a hefty fine?

It should be said that only a few instances of unnecessary risk taking were observed during the stay on the platform. As we have already stated, the culture appears to be a strong one and best practice behaviour seems more to be the norm. Nevertheless, the evidence reported in STOP cards and from the various audits suggests that there is an

issue to be addressed and a more explicit and systematic emphasis on managing motivation is likely to play a significant part in the response. What is required here is less of an emphasis on categorisation of the various non-compliances to a position where greater attention and thought is given to encouraging compliance. There is a danger in searching for the answer that the analysis of data becomes too reductionist when the key issue of motivation can serve to explain many such non-compliances. As the heading of the section states, our assessment is that behaviour and motivation are issues that have not been fully explored in the context of achieving further improvement in both practice and performance on the platform.

Not complacent but not challenging either

Our final key observation is concerned with the level of vitality or passion associated with the drive to improve safety. The platform is focused on maintaining good performance and although we would not describe this focus as complacent, neither would we conclude that there is sufficient challenge if the next level of performance is to be achieved. This is not surprising perhaps given that the output data reflects a sustained period without a serious injury (where serious is defined in terms of a LTA). Our assessment suggested that this is where the focus lies rather than on achieving improvement through not just good safety promoting activity (inputs) but through measurable risk reduction.

It is our assessment that the current practice on the platform is likely to maintain the level of performance experienced, characterised mainly by the occurrence of relatively minor injuries and varying near misses. The concern must be however that any of these outcomes could be more serious and therefore the platform should not feel assured but must continue to focus and have higher expectations for the future. In addition to this, there must be a suspicion that not all unsafe acts get reported or are detected. The manner in which members of the crew feel that recent incidents have

been handled also suggests that individuals may feel even less inclined to report. These issues represent a significant challenge for the platform.

Leadership & Management

Strong safety leadership & management but largely antecedent focused

Safety is promoted as a key consideration on arrival at the platform. The OIM takes a lead role in reinforcing expectations and communicating recent events. Evidence exists throughout the platform of the ongoing effort to manage safety both in operations and other supporting areas of activity. In this context, a developing issue is what appears to be a change on the platform, at least as perceived by contractor personnel, in the relationship between MOGC as operator and the various contractor organisations. This is a leadership issue in that there are signs that it is having an adverse impact on morale.

Overall, our assessment suggested that good practice exists widely in relation to safety leadership and management. However, the main emphasis is on raising awareness and reminding people of their responsibilities which is a largely antecedent based approach. There is much less systematic emphasis on the management of consequences to influence safe behaviour. In addition, we feel that if gains are to be made then safety leadership needs to "move up a gear" and become yet more passionate, enabling and challenging.

Recognition of human factors / behaviour as key issue but lack of strategy

The need to manage and influence how people behave, rather than create more and more control systems and procedures, seems to be accepted generally by those in responsible positions. MOGCs Golden Rules and the platforms own standards are given prominence and as such provide clarity of expectations. There is some emphasis

on teamwork (ops teams trip objectives) and the development of local responsibility (area monitoring system). The STOP system and Management Safety Tours are used as key tools with respect to coaching and reinforcing safe behaviour. These various discrete tools have been added over time and serve to stress the criticality of managing behaviour in the context of safety. What is unclear in the context of this criticality is: how these various tools constitute a coherent behaviour management strategy based on good theory; how they are evaluated in terms of value-added; and how the platform goes about identifying and filling gaps in the strategy. We suspect that the same would not be true in the context of the processes and technology required to extract oil and gas.

In this context, the critical leadership task if performance is to achieve new heights is, we believe, to take a step back and seek to identify new perspectives regarding the problem. This may require some additional understanding of the human factor issues. As we have already stated a number of times, simply doing more of the same may not generate the improvement sought. Yet more antecedent based campaigns are likely only to serve to reinforce current thinking – there is a need for some different thinking. The focus here should be on introducing new thinking to address the influence problem rather than introducing new safety systems. The emphasis needs to continue to be to ensure that people do the simple things well for it is these actions that incident investigations typically tell us make the difference. The requirements regarding how people behave are quite clear. The leadership challenge is one of achieving more perfect compliance.

Other issues

There are a number of demographic issues that require some consideration. We were told that the profile of the workforce in terms of age is becoming more skewed towards older persons. Given the long-standing tenure of some of the workforce, and

the potential for some complacency to be associated with older personnel, then this is something that will need some consideration.

Similarly, there is a view that the workforce is more mobile with a greater incidence of green hats. Such visitors and new starts will not be familiar with the platform and this again has some implications for management and the maintenance of the strong culture. Green hats can be a useful source of challenge to existing practice and the platform could benefit through seeking their explicit feedback on the efficacy of common OSPREY practices before such people become integrated into the platform's culture.

Performance

Good on inputs, poor on outputs

Performance data for 2004 indicates a contrast between targeted outputs (poor) and inputs (good). There are a variety of possible explanations to account for this. At face value, it would be expected that good inputs should lead to good outputs given that the inputs are intended to promote safe practice. One conclusion could be that the supposed relationship between the inputs (independent variables) and outputs (dependent variables) is not a strong one. Such an explanation ought to lead to a review of the efficacy of the inputs in driving forward safety performance. This is an important issue given that there is little evidence of evaluation in terms of the value added by the various current inputs.

Small number of outputs make trending / explanation difficult

An alternative explanation is concerned with the small numbers involved (particularly output measures) and the relative insignificance of the data captured. As we have already stated, data relating to human performance rarely produces clear patterns in short time periods. From this we can further conclude that it is extremely difficult to identify trends or causal relationships from what is relatively insensitive data.

Overall, it is very difficult to be definitive with respect to OSPREYs safety performance during 2004. Clearly, there have been incidents some of which have led to expressions of concern. The problem lies not so much in the performance but in how performance is measured. Given the small numbers involved in measuring outputs, the need is to measure those performance variables that are more sensitive to changes in management and safety activity.

Input measures count activity rather than risk

The focus on measuring inputs has been in part the response to the above argument. However, OSPREYs input measures typically are activity counts and the basis for such a focus lies in the presumed output-input relationship referred to above. As we have suggested, the data serves to question the strength of the relationship. Where a relationship is deemed to exist it is the one between incidents and risk taking (unsafe acts) often promoted through reference to Bird's Triangle. The measurement of the number of near misses, STOP conversations and Management Safety Tours could be helpful but requires the assumption that these are representative of actuality. In reality, these may not be representative samples of what is happening. One theory, for example, is that STOP conversations target specific events and not others – they may not be a good sample. There is an argument for saying that our interest in STOP cards should not just be in what gets reported but also in what might not get reported.

One way forward is a greater emphasis on trying to measure risk rather than simply those activities designed to promote safe activity. As we have already indicated, the various audits used on OSPREY do have some capability in this respect in that they identify instances of non-compliance.

Audits reveal variety of non-compliances

Audit activity on OSPREY is measured in relation to the percentage completed against the schedule. This is not a challenging target – indeed in relation to the importance with which safety is held we would regard it as a soft target and it is perhaps not surprising that input performance is so good. What is of more interest is what the audits reveal. It is these non-compliances that would constitute a better measure of performance in that they are indicative of risk exposure. Currently, the fact that the various audits undertaken on the platform identify a range of safety concerns does not feature in judging the platform's effectiveness in managing safety. We feel that this is a significant shortcoming.

In conclusion, we feel that there is scope for developing the way in which safety performance is measured so as to give a more valid and reliable picture of safety on the platform. In this respect we would suggest the following parameters are considered:

- Non-compliances identified (risk occurrence and exposure) rather than activity completed
- Level of risk exposure as indicated by the non-compliance (risk level) rather than number of STOP cards handed in
- Aim to establish the representativeness of the sample (validity, reliability and generalisability of the data) rather than assuming representativeness

If adopted, the resulting measures will be more indicative of risk exposure and will also provide more reliable insight as to whether performance is improving in that the focus will be on risk rather than on activity that it is assumed will reduce risk.

Culture & Climate

Strong culture with high expectations

Safety has a strong presence on the platform such that everyone is aware of his or her responsibilities. Many of the crew have been associated with OSPREY for a number of years and in view of this have developed a strong identity with the platform and its performance. There is a collective sense of pride with what has been achieved and a focus on sustaining the serious injury free performance. Generally, there are high expectations with respect to both behaviour and performance. Visitors and new starts are made very well aware of what is expected of them and also what the platform does to ensure their safety.

Strong intentions to get SHE right

As might be expected from this strong culture, there is considerable emphasis on getting SHE right. There seems little doubt that in most people's minds safety is of high importance and activity is planned and delivered in accord with this. There also exists the recognition that this level of effort and application cannot be assumed and that there is a need to maintain the focus. This attitude towards safety exists at all levels and across all the various companies involved in the operation and maintenance of the platform.

Current climate – lowered morale?

A significant issue concerns a state of reported lowered morale in the case of some specific crew members as a direct result of events that have taken place this year and their perceptions regarded how the incidents have been handled. We were able also to get a sense that within the contractor community the level of satisfaction was generally less than it has been. Some spoke about how changes in certain areas were

reinforcing a sense of a divide between MOGC personnel and contractors and the impact that this was having on the vision of an "OSPREY team". Overall, we did not feel that this was a critical issue but it is one that requires some consideration. There is obviously a need to work towards maintaining high levels of morale and teamwork in the context of good safety management.

Just Culture – misunderstood?

A specific issue relates to the increased focus on MOGCs "Just Culture". Whilst management has apparently been careful in their positioning of this, the crew generally seemed to have gained the view that this is more about forcing accountability and exerting discipline rather than understanding personal contribution. Because of this, the crew feel that there exists a sense of increased pressure on them to the extent to which some suggested that this will have an impact on people's propensity to report safety issues. Clearly this is counter to what is required and the suggestion is that there is work to be done to regain the level of confidence that has existed previously.

The emphasis on developing a "just culture" ought not be confused with the implementation of a policy and procedure. The development of a "just culture" implies much more than a decision-tree model determining the level of culpability. Whether a "just culture" exists or otherwise is something that the workforce will determine. Currently, their view seems to be that the culture is becoming less rather than more "just" and this may have implications for the level of effort, good-will and open reporting.

Safety Improvement Strategy

Not strongly centred on needs analysis?

There exists an emphasis on driving safety improvement and the focus on the SHE Short Term Plan is increasingly focused on issues being identified and owned by the platform. Our concern is that the process involved in determining the safety improvement plan is not as strongly focused on an empirical needs analysis as it might be. This relates back to the need for more rigour in the way that performance is both measured and understood. Our view is that the identification of safety improvement issues should build in a sense of involvement and ownership but the prime task must be on identifying what needs to be done to improve safety.

Initiative led rather than integrated strategy?

This is an issue we have already discussed. Our view is that given the accepted importance of the link between how people behave and safety performance, then there ought to exist an integrated strategy positioned to deal with the problem. Of course, as organisations seek to respond to concerns they develop and introduce new tools and techniques. When these concerns fail to go away the tendency is to add more tools and techniques rather than adopt a more strategic perspective. Given the various comments we have made with respect to current practice, a main conclusion must be to look towards reviewing the existing techniques and practice with a view to developing a more integrated strategy. The aim of this could include a mapping of all the existing tools and how they interrelate, avoiding any duplication, introducing greater rigour in terms of ensuring greater value-added, and in the identification of any gaps in the strategy.

Little emphasis on evaluating value-added

The use of audit within safety practice is well established. However, there is much less emphasis on the evaluation of impact or value-added. Part of the problem here lies in identifying variables that can be measured and that represent actual safety improvement in a reliable way. Just because this is difficult should not be used as the response to why evaluation is not carried out. The danger is that tools and techniques continued to be used and to have scarce resources allocated to them when the impact being achieved is not what is expected or desired. Evaluating the impact of safety interventions ought to be a high priority given the importance of getting SHE right. This comment has general significance within the business in relation to SHE.

Worker Involvement

OSPREY sense of team not as strong as previous?

We have addressed this issue a number of times already in this report. The issues may not simply be local ones. Our concern is that safety must be seen as a partnership issue but that there apparently are pressures that are operating counter to this. What is required is an emphasis on formally recognising the efforts and achievements of the contractor organisations and their workforce so as to provide an appropriate counter-balance to what is seen as being a negatively loaded strategy. The appropriate level of challenge is essential to drive performance upwards. However, when this challenge is regarded as being excessive then the result can be to impact on performance negatively. In addition, such pressures tend to promote a focus on more parochial needs rather true teamwork.

Ops Teams focused on teamwork and targets

There are 5 operations teams and these are able to function as such due to the way in which crew changes are managed. This has promoted a team approach including the introduction of team objectives and an accompanying focus. There is scope to develop this further and to consider adding in some more specific performance measures although care should be addressed here in ensuring any competitive element operates functionally. A way of tackling this is to introduce a performance measure, which is concerned with attempts to help other teams improve their performance. The development of these teams as performance units could be one means in which further leverage can be applied to motivate the safety effort. A specific target here could be the number of non-compliances identified through the audit process, as this is a current concern on the platform.

The principle outlined in the previous paragraph concerns motivating effort through introducing local team measures of performance. This is a general principle that in the

context of the platform could be given some careful thought. The introduction of the area-monitoring scheme on the platform is aligned with this principle and there is scope to further develop the approach to focus more specifically on driving safety effort. The same principle might be applied to the contractor community on the platform but given how their shift pattern works this is not as straightforward.

Contractors feeling somewhat 2nd class stakeholders

We have referred to this issue a number of times. Careful consideration needs to be shown so as to ensure that the contractor community feel equally valued by the platform. This represents a challenge for MOGC given that the individuals involved are at times subject to terms and conditions by their employees that are less favourable to those of their MOGC fellow crew members. The less well-disposed contractor crew members might feel that given that they are less well cared for then why should they put in the same effort as others? This sense of unequal equity is a source of diminished motivation. It is difficult to see how such a situation can be easily resolved given the contractual relationship. However, whilst they have not created the issue, there is no doubt that the platform's management has the task of managing it so as to get the best out of the workforce.

Safety Rep role not leading in safety

The role of the safety representative is an important part of the approach to managing and promoting SHE. In our experience, how this role is performed varies considerably. When the role is deployed actively, energetically and creatively it can act as a significant performance driver. Unfortunately, we did not get the feeling that this was the case on OSPREY. Whereas the safety representatives had agreed to take on the task of reinvigorating the use of STOP on the platform, there was little evidence to show how they had taken on this important task.

This is not to say that the safety representatives have not driven various initiatives, the organising of an annual safety reps. week was to be repeated in the near future involving a variety of safety promotion activities. Involvement in this carries lots of reinforcement in that it involves the giving of a number of relatively high-value prizes. The challenge is for the safety representatives to become more actively involved in promoting safety on the platform outside of these type of events.

STOP

STOP is an active process on the platform although at the time of the visit the need to reinvigorate it had been recognised and this featured as one of the safety action items on the new SHE Short Term Plan. A review of the STOP card data indicated that usage was high (86 cards in two weeks) although this may be driven by the promotion of number targets. Involvement across the workforce was also seen to be high possibly for the same reasons. A further positive was the emphasis on the use of the process to reinforce safe behaviour and good practice at least as much to correct and challenge poor practice.

The need to review the process centred on concerns about the quality of the data and the general response to it. People on the platform question the value it adds to the safety effort. We would advocate that the debate should focus on whether the process does indeed provide "good value for money" and not just be concerned with its reinvigoration. This is a difficult challenge given that STOP features significantly in MOGCs safety strategy. Our concern lies in the continued need to drive involvement through number targets, the resulting quality of the data produced, and the opportunity cost issue (what could be achieved if the resources applied to STOP were used differently).

This is not to say that STOP should be dispensed with but that such a review should be regarded as being a healthy part of the safety management process. One of the principles behind the use of STOP is to create worker involvement in observation and

coaching. We are not convinced that it is creating this at the level required to make a significant impact on the platform. Perhaps the safety representatives would feel more energetic if the role was to consider alternative ways of achieving the sought for greater worker involvement. In addition, perhaps consideration needs to be given to worker involvement in the observation and audit of management activity. Given that managers create the context in which the workforce work, there is good argument for the observation / audit process to be more explicitly two way.

Reinforcement & Recognition

Performance targets set people up to fail, demotivate?

The performance targets that people tend to focus on are those that attract a lot of attention from significant others. Unfortunately, these targets are "negative" targets in that they relate to what has gone wrong rather than what has been achieved. They also represent very small numbers such that the line between success and failure is a very fine one indeed. The picture can change very rapidly from good performance to poor performance despite the fact that the perception will be that little has changed in the effort being applied. In view of this, such targets have a sense of setting people up to fail. The effect on motivation is further exacerbated by the fact that people feel that they do not have direct or full control over influencing these targets.

Given these issues one can suspect that people will show less interest in such targets. In that it makes no sense to alter these targets downwards in that this would create the wrong expectations, then the challenge is the introduction of targets that are within people's control, and are regarded as being more meaningful and challenging. In our view the near miss reporting and audit schedule completion targets do not meet these requirements.

By the time of our visit the key performance data indicated that OSPREY had already failed on 4 of its 6 Health and Safety targets and, importantly, there was nothing that could be done to reverse the situation in the remaining 3 months of the year. Indeed, a closer look at the data indicated that one of the targets had already been failed before the end of February and others failed with 2 quarters yet to be completed. It seems fair to conclude that this data will have done little to help motivate people to increase their effort given that the position could not be regained.

"Good" people currently feeling a bit "beaten up"

A consequence of the events on the platform, and linked to the above comments regarding the data and targets, has been the effect this has had on certain individuals. This is something we have already referred to. There is a danger in such situations for people to become increasingly demoralised. The comment was made to us that the perception was that "you were only as good as your last job" which is to negate a lot of experience and effort over a sustained period. This is a concern in that such a reaction is unlikely to predict the behaviours required to drive forward the culture that will produce the best safety performance.

Recognition opportunities not exploited

Linked to the above is the lack of emphasis on recognition for effort and achievement. There is a sense that you can only get safety wrong – you can't get it right no matter how much effort is applied. This is a perception but often it is perceptions that need to be managed. If the platform is to achieve the sustained and focused effort required to drive safety performance upwards, then people must feel that such an effort is valued. Instead, the view was that the climate was moving in the opposite direction reinforced by the increased emphasis on the "Just Culture". This is a concern given that the management of behaviour through the use of negative reinforcement (or threat) caps performance and creates feelings of dissatisfaction. The challenge is to develop a more positive approach in which safety effort is frequently reinforced.

Safety Rep week – lots of prizes but to what effect?

The use of a positive approach is understood and the design of the safety reps. week included a significant emphasis on giving prizes for engagement in certain activities. The problem here is that the reinforcement being managed (giving of prizes) is not driving the required behaviours, is only focused on one week, and lacks challenge. There is a sense that on the basis of what happened the previous year people were

awarded big prizes for not doing very much. This was in direct contrast to the experience during the rest of the year when people did a lot but perceived they got little recognition back in return.

£45k budget for reinforcement

A similar point emerges from a consideration of another platform award scheme. We understood that a £45k annual budget was available for providing awards based on recognised contributions. From what we were told the scheme was operated in a discretionary manner rather than one based on the achievement of specific criteria. In view of this control of the system had recently passed to the OIM who was acting as arbiter of such awards to prevent what appeared to be low-level abuse of the system.

This example, together with the safety reps. week of prizes, are indicative of a lack of precision in the management of consequences and use of reinforcement to drive effort. Given the amount of money involved, we believe there is significant scope to increase the safety effort through the design of a more systematic and team-based approach.

Summary

OSPREY is a platform with a focused leadership, good management and a strong SHE culture. Its performance has been very good for a number of years. People who work on the platform have good attitudes to safety. Both the management and the crew are entitled to feel proud of what they have achieved.

Despite this, incidents continue to occur and some of these in particular suggest that all is not as secure as it needs to be to prevent serious injury and serious incidents. In short, there is room for further improvement and as such we suspect that this reflects a similar state to be found on other MOGC platforms. Indeed, its our conjecture that what we have seen on OSPREY is probably representative of elsewhere – what perhaps currently differentiates OSPREY from other platforms is its outputs. It seems both possible and predictable that whilst other platforms have a better output recent record, this should not be regarded as evidence that levels of risk are lower. This might explain what is an apparently confusing picture where some assets progress from a state of poorish performance to good performance whilst others move in the opposite direction.

The challenge that faces OSPREY is a significant one given the current relatively high level of performance. However, there are issues that can be addressed but the likelihood is that these will need new thinking. In particular, there is a need to place greater emphasis on motivation as a key issue given that people have the capability to improve their behaviour and also that morale may have recently taken a dip. Linked with this is the need to adopt a more sensitive approach to measuring performance. The current measures are unable to provide an accurate picture as to the level of unnecessary risk exposure which given the low level and infrequency of incidents constitutes the most reliable indicator of further safety incidents

Overall, there is a need to develop a more integrated approach to managing behaviour in the context of health and safety. Such an approach should include a much stronger emphasis on being sure about what actually makes a difference to how people behave.

Recommendations

1. Conduct a review of how safety performance is measured. In particular, there is a need to ensure that input measures

   - Are focused on activities that are known to promote safe behaviour
   - Provide evidence of a reduction in risk

2. Focus on how performance measures are used with particular respect to how they link with morale and motivation

3. Carry out a strategic review with a focus on all those elements designed to influence how people on the platform behave with the aim of creating a coherent and integrated strategy. Answer questions such as

   - what are the key assumptions that lie behind the various initiatives and how well do these stand up to scientific scrutiny?
   - how do the various elements fit together?
   - what are the gaps / duplications?
   - what does / does not add value (evaluation of relatively impact)?

4. Develop new theories and explore new thinking. For example, challenge the assumption that more control measures are the answer to performance problems, search for alternatives (eg performance is more of a function of ownership and involvement – eg further develop the ideas associated with area ownership).

5. Increase knowledge base of key and influential members / stakeholders. Given the significance that motivation plays in safety effort and performance,

particularly when systems, procedures and competence are extremely well developed, there is an implied need to achieve greater understanding of what motivates people and the implications for management.

6. Develop a more challenging approach to safety leadership that continues to raise expectations but is also able to maintain morale and focus.

7. Focus on doing the simple things well. Scale down the number of initiatives and focus on ensuring those that have potential for maximum impact become organisational habits.

8. Re-address the positioning of "just culture" so as to achieve greater understanding as to its use. Get buy-in.

9. Challenge the move towards greater separation of MOGC and contractor stakeholder groups. Instead, aim to create a shared interest and develop a more positive approach to influencing contractor effort.

Data collection and report by:

Charles Shoesmith
Managing Director
PsychaLogica Ltd
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Contact PsychaLogica as follows:

✉ charles.shoesmith@psychalogica.com
☎ +44 (0)1543 432468
☎ +44 (0)7711 560422

www.psychalogica.com