HeliOffshore
Safety Through Collaboration

Results of a survey exploring safety within the offshore helicopter industry

September 2023

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(approved for external publication)

Executive Summary

In January 2023, with support from the IOGP Aviation Sub-Committee (ASC), HeliOffshore ran a cross- industry survey to help understand the state of certain elements of the offshore helicopter sector. The survey was shared widely through helicopter operators, including with frontline staff, as well with energy company customers via their aviation advisors. In total, more than 1,000 responses were received, and this report presents the analysis of those responses. The results paint a mixed picture of the industry in terms of safety performance improvement.

This survey was similar to one undertaken by HeliOffshore two years prior. Many of the questions aimed to measure the change over the last 12 months to see the 'direction of travel' rather than an absolute rating, with the associated subjectivity. The survey included questions across the following areas:

Demographic Information;	Ground Operations and Helidecks;
Safety and Quality Processes;	Workforce;
Airworthiness and Supply Chain;	Remote Working; and
Flight Crew Training;	Future Risk.

In around 60% of questions, the situation was rated on average as improved (to varying degrees) when compared with 12 months ago. This included all questions relating *to Safety and Quality Processes*, *Flight Crew Training,* and *Remote Working*. However, most of the questions relating to *Airworthiness and Supply Chain*, and *Workforce* on average rated the situation as worsened, to a greater or lesser extent. The responses and comments provided by the respondents raise several themes worthy of further focus, many of which will be familiar to those in the industry.

Supply Chain

Following COVID and the prolonging of an uncertain future for the oil and gas industry, much of the supply chain reduced manufacturing and spares holding rates. This was followed by an increase in demand for flying which has left the supply chain in a very difficult situation. Perhaps unsurprisingly then, *Supply Chain* was rated as the most degraded part of the industry system, along with *Rate of Robberies, Support for AOG and Rates of Extended / Deferred Maintenance,* all of which are arguably consequences of the Supply Chain slow down.

People

If, as we believe, '*safety is done by people*' then they surely represent both the greatest strength and the greatest vulnerability within the safety system. There is an industry-wide problem in recruiting and retaining staff. This potentially results in not only a short-term limit of resources, but also a longer-term loss of experience.

It is clear from respondents' comments that much of the strain in trying to meet demand is being taken by the people at the frontline who are being asked to '*do more with less'*. Many respondents spoke of maintenance staff keeping ageing aircraft available, with a reduced number of staff robbing spares for aircraft to be flown by a reduced number of pilots. That the system is still functioning is testament to their hard work and commitment. However, this short-term success potentially comes at a significant medium- to longer-term cost.

The three most negatively rated questions in the Workforce category were *Resources, Overtime Levels* and (most negatively) *Workforce Fatigue.* More worryingly, in 2020 the 12-month change in *Workforce Fatigue* was also rated 'strongly negative', meaning it continues to get worse from peak COVID times. This is unsustainable.

Set against this backdrop, one might expect to see a 'protest vote' from frontline respondents in the data, and yet many of the categories see positive responses and improvements. Indeed, when asked if they would recommend a career in the industry, the majority of respondents replied positively (albeit with some caveats around the current situation). This is not a workforce disillusioned with the industry, it is a committed workforce under strain. As a result, we should take the concerns they raise even more seriously. There are occasional hints in the data of non-compliance to achieve the goal, or punitive behaviour in the industry – we should all be greatly concerned by these negative trends.

Alignment in the industry

The survey design allows for comparison of perspectives from the helicopter operator and energy company customer communities. Interestingly, the results show alignment between the two communities with, if anything, a growing and more emphatic acknowledgement of the worsening of the negative elements by the energy customer group.

When comparing results regionally, in general, those respondents in Europe and North America seemed to perceive a more difficult situation than the average response. This may be a simple result of higher flying rates, or possibly other underlying trends.

The responses and comments contained in the survey arguably provide some of the best 'leading indicators' we could hope for - a description of the experience of working in the industry today, of '*work as done*' rather than '*work as imagined*'. It is becoming increasingly necessary for alternative sources of workplace observation data and analyses to be pooled to allow for the creation of as accurate a picture as possible of the 'current state'. To that end, the sharing of Line Oriented Safety Audit (LOSA) data, Maintenance Observation Programmes (where they exist), audit and oversight activity (both internal and external) would deliver clarity, drive collaborative action and demonstrate a more '…open, responsive and aligned industry'.

This summary covers the headlines from the survey. HeliOffshore is leading work or plans to partner in a number of areas highlighted by this survey, including:

- Fatigue Risk Management in Maintenance
- Developing indicators to anticipate future supply chain demand
- Digital Twin modelling to highlight regional variations in operational risk
- Establishment of observational programmes in the cockpit (LOSA) and the hangar (Maintenance Observation programmes like MPPM) to reveal system weaknesses in real-time and drive effective action

Our previous survey delivered a number of recommendations, some of which are repeated in this report. As an industry, we must find ways to recognise these repetitive issues, agree priorities and develop deliberate action plans for execution. The recommendations provide a starting point, but it is hoped these data can prompt wider discussions which draw on these results to address specific areas of need and follow-up activity. No organisation can do this alone; truly collaborative action is necessary. We depend on each other to improve.

Tim Rolfe
CEO, HeliOffshore

HeliOffshore members have access to the full report via this link

For non-members, the following pages outline the layout of the full survey report, highlighting the topics covered by the survey questions in each section. The Conclusions and Recommendations sections are provided in full on pages 8 and 9 of this abridged report and are relevant to all.

Any questions arising from this report can be raised directly with members of the HeliOffshore team or via info@helioffshore.org

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Section II – Energy Customer Responses

Section III – Conclusions and Recommendations

5 Conclusions

Supply Chain is the most negatively rated category in this survey and this is clearly a significant stress point in the industry; it is highlighted by many as a short-term risk. This issue is likely to remain in the industry for some time and is clearly part of the reason for many of the other negative categories such as *Rate of Robberies*, *Support for AOG* and *Extended / Deferred Maintenance*.

However, the other negative categories point to where this strain may be appearing – *Workforce Fatigue* is the third most negative category. Other negative Workforce categories include *Overtime Levels*, *Resources, Absence Rates, Resource Impact on Safety Investment,* and *Physical and Mental Health.*

The report to the 2020 survey noted that: *"The data describe an industry challenged to maintain service delivery against a backdrop of COVID, fierce financial restraints and reducing resources. Some mitigation processes are in place, but much of the load is being taken by the frontline personnel within the operations."* The picture from this survey is similar.

The comments highlight the loss of personnel, the lack of resource and the loss of experience along with increased flying and increased maintenance from robberies as placing considerable strain on staff. Set against this backdrop, one might expect to see a 'protest vote' from respondents in the data, and yet many of the categories see positive responses and improvements. Indeed, when asked if they would recommend a career in the industry, the majority of respondents replied positively (albeit with some caveats around the current situation). This is **not a workforce disillusioned with the industry, it is a committed workforce under strain**.

There are occasional hints in the data of non-compliance to achieve the goal (such as 'sitting on' defects) or punitive behaviour in the industry (ranging from suppression of reporting to actively victimising staff for raising issues to their organisation). Clearly, these are unacceptable traits, but they may be symptomatic of a greater stress in the industry.

5.1 Future Surveys

The survey seems to provide useful information for the industry that is not available through other routes. Therefore, it would be reasonable to repeat the survey at fixed periods.

One obvious weakness of the survey is the lack of absolute measurement. Although the comparative approach is adopted for a number of reasons (as described in Section 3.4) an absolute measure would still be more desirable. One approach to this may be ask absolute questions (eg "*How effective is system X?"*) and offer a scale against which to rate the answer.

English is clearly the dominant language with 77% of helicopter operators answering in that language. We will continue to review the potential benefits of offering the survey in multiple languages.

At present the survey features a large number of questions, with some of the questions relating to perceptions of metrics that may be consistent throughout an organisation (eg absence rates, reporting rates etc). It might be sensible to adopt a 'two pronged' approach by gathering objective data from member companies directly and using the questionnaire to assess subjective issues from the frontline.

6 Recommendations

The previous survey produced a number of recommendations, specifically:

2020 Survey Recommendation: *Development of leading indicators to track potential supply chain issues.*

2020 Survey Recommendation: *The Master Minimum Helideck Equipment List (MMHEL) is incorporated into a baseline document that outlines the responsibilities of the helideck operator to provide information to, and to provide passenger and cargo handling services on behalf of, helicopter operators. The requirement for this 'baseline document' should be referenced in R690 at next update.*

2020 Survey Recommendation: *The Helideck WG and ASC identify and address the causal factors behind manifesting inaccuracies.*

2020 Survey Recommendation: *Operators actively monitor fatigue, physical and mental health indicators against operational levels.*

Looking at the issues ranked most negatively in the present survey, the 2020 recommendations and the issues related to their categories were prescient. However, little significant and effective progress appears to have been made by stakeholders in any of these areas. Therefore, the following recommendations, two of which are repeats from the 2020 survey, are emphasised or re-emphasised for action as a result of this survey:

2023 Survey Recommendation (repeat from 2020): *Development and tracking of leading indicators to identify and offset expectations around potential supply chain issues.*

2023 Survey Recommendation (repeat from 2020): *Operators actively monitor fatigue, physical and mental health indicators against operational levels in all frontline workplaces, particularly where there is no regulatory requirement to do so, such as in maintenance, ramp and operations support.*

2023 Survey Recommendation (new): *Industry stakeholders develop and implement a Recommended Practice for robust monitoring of fatigue in maintenance.*

2023 Survey Recommendation (new): *The use of workplace observation programmes which reveal how organisational and industry systems effectively support frontline staff in all safety critical areas of operations, should be developed (where necessary), established and optimised as part of a shared industry strategic approach.*

In addition, several of the recommendations made in the Industry Action Plan on Night Deck Landing Practice (published in December 2022 and available via this link) are pertinent to this survey and will not be repeated here. All stakeholders are encouraged to support the completion of actions in the Industry Action Plan.