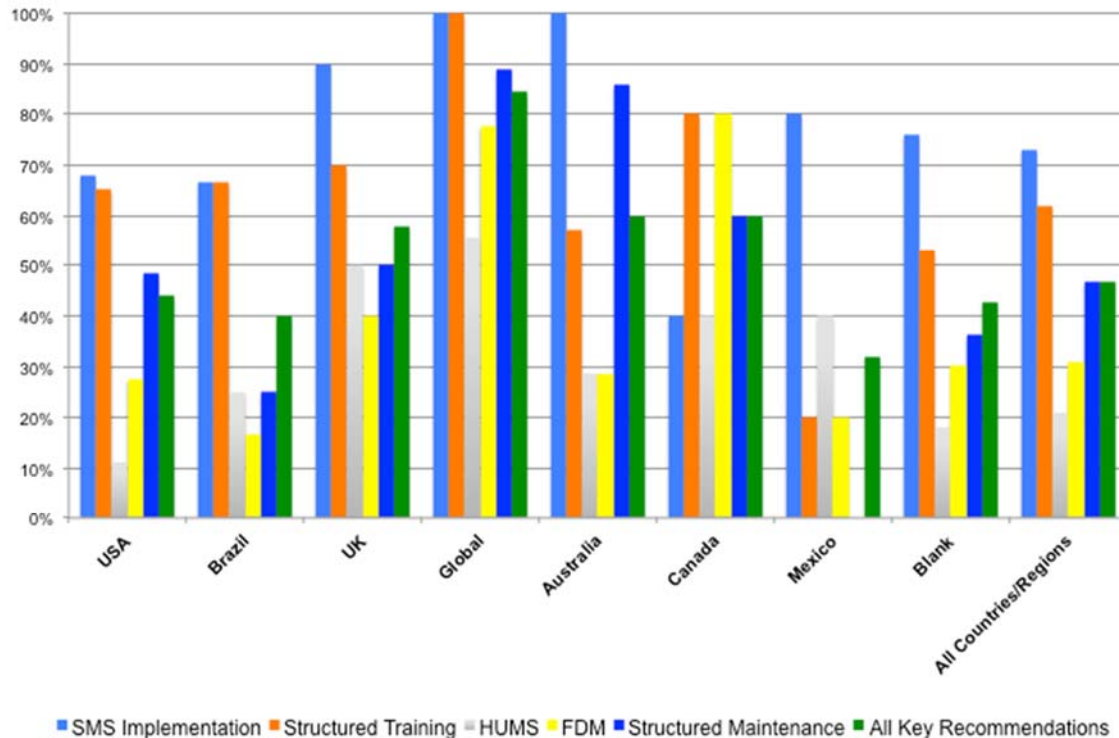


IHST Global Safety Survey Results

Over this past year, the IHST has promoted a survey (<http://ihst.org/survey>) to judge awareness and use of its products. One of the goals of the survey was to promote more awareness of the IHST's work. Another goal was to learn about the use and impact of the IHST's products. Over time, the IHST hopes to correlate the survey results with accident data to see if the products are on target toward the IHST's vision of zero accidents.

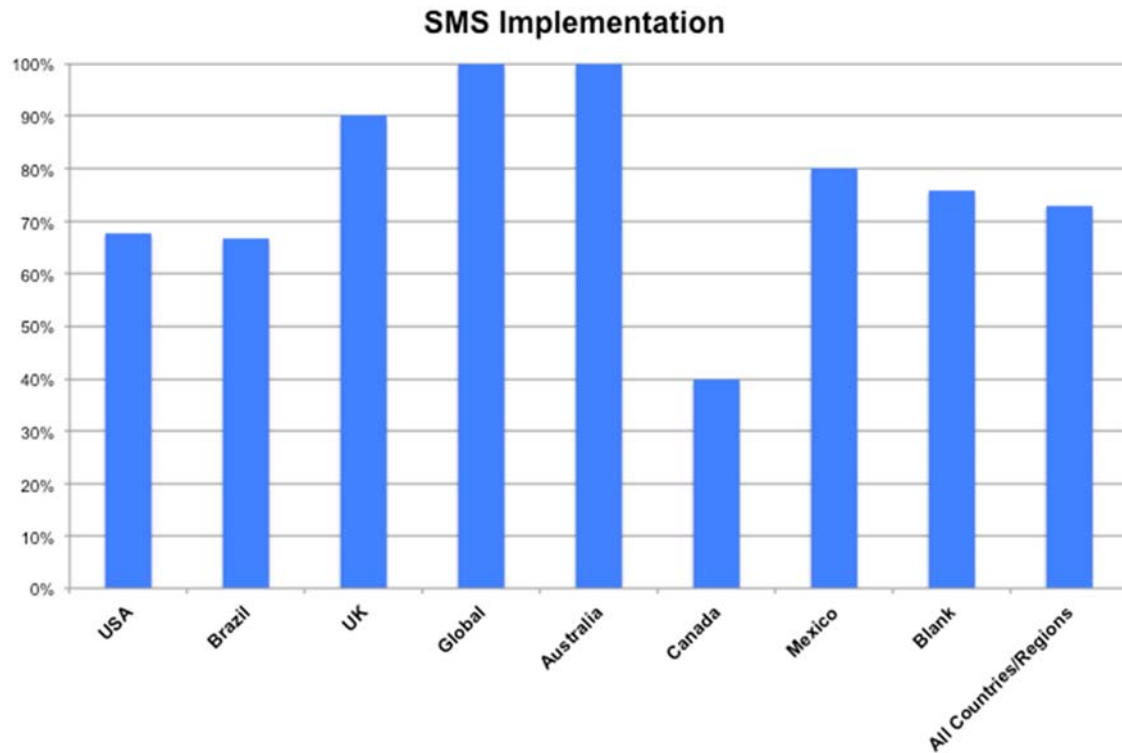
There have now been 351 responses to the survey from 53 different countries. The responses by country generally fall in line with the number of helicopters in those countries. The figure below shows some of the results from the countries with the most responses – in this case the percentages of respondents who have implemented the IHST's top recommendations. Where you see "Global" you might substitute "international operators who support the oil & gas industry." "Blank" reflects the unfortunate fact that 83 respondents did not state their country or region. The "All Countries/Regions" category shows the averages for all 351 respondents.



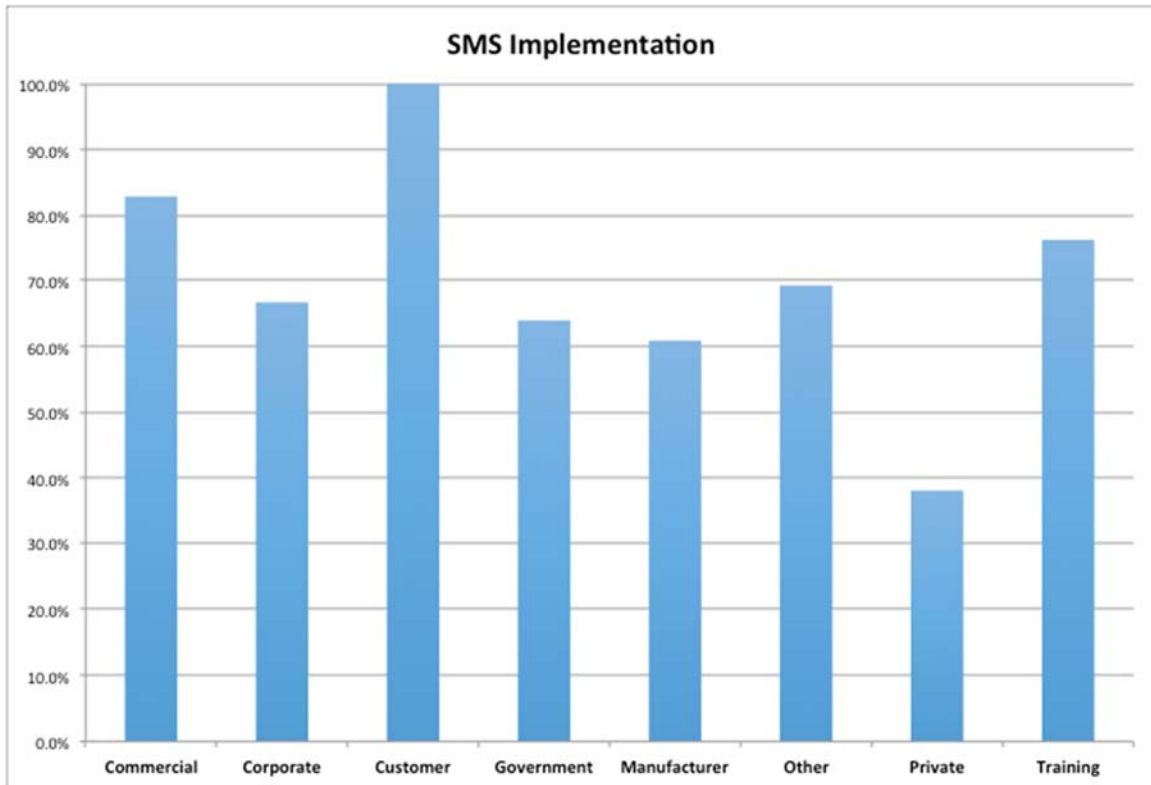
We must admit that 351 respondents is a small sample for the more than 35,000 civil helicopters in the world. We do not propose that these results are a representative sample. These results may in fact represent the best operators in the civil helicopter industry who were willing to state their positions with regard to the IHST's work. Nevertheless, these results do give indications of which of the IHST's

top safety recommendations are gaining the broadest acceptance. We must of course take into account that the IHST's top safety recommendations may be getting implemented for reasons other than the IHST itself.

For example, SMS implementation, which has the highest overall implementation rate of all the IHST's top recommendations, is generally highest in countries where SMS has been mandated the longest; e.g., UK and the global operators supporting the oil & gas industry.

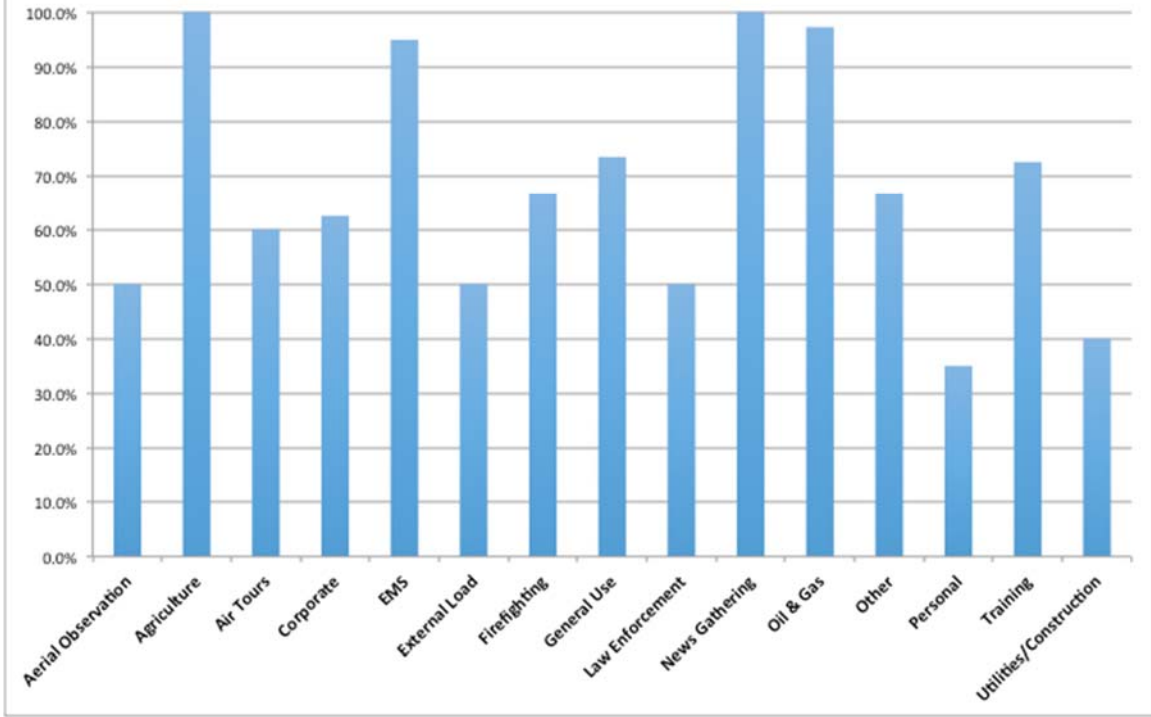


When we break down the results by the type of operation, we see that operations driven by customer requirements had the highest level of SMS implementation.

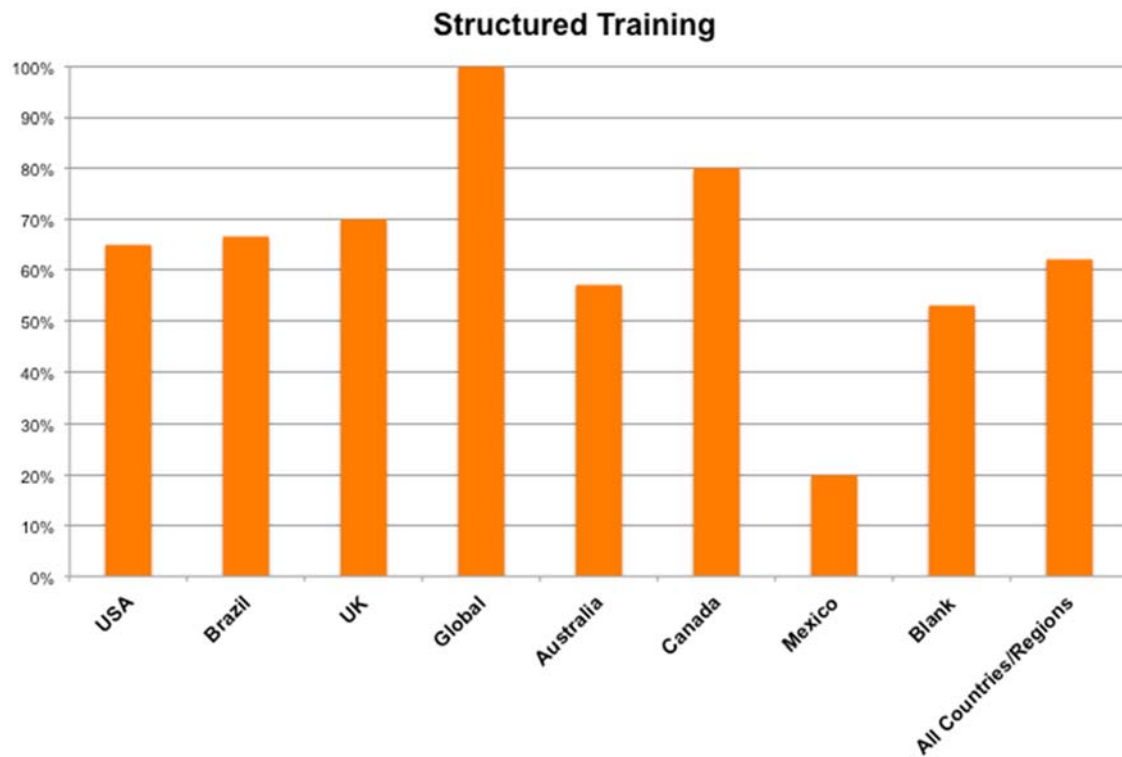


In this survey, all the customer responses were from representatives of oil & gas companies who use helicopters in offshore operations. We see similar results in the chart below, where we break down the results by the uses to which the respondents put their helicopters. Note that Agriculture and News Gathering, which report 100% use of SMS had only one survey response each – a result that supports the concern that these survey results may reflect the best of the industry rather than the norm. Nevertheless, it is encouraging to see that 39 respondents who use helicopters for emergency medical services (EMS) report a very high level of SMS implementation.

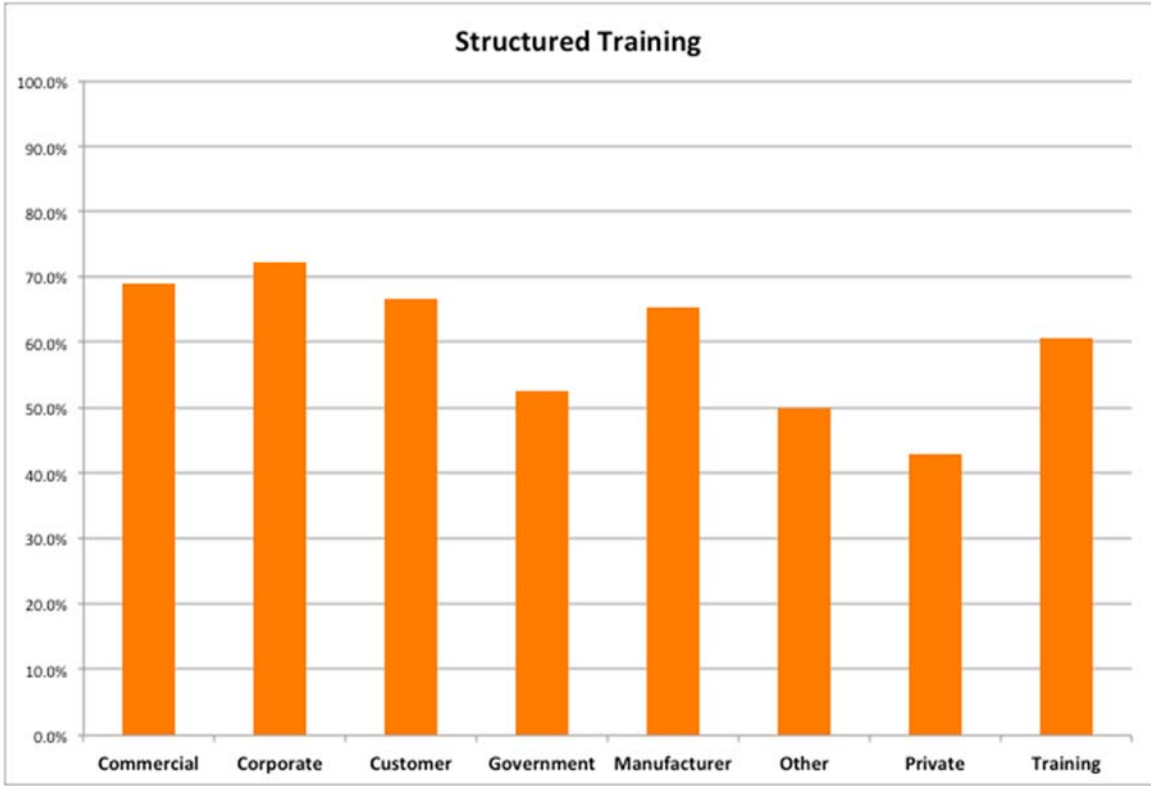
SMS Implementation



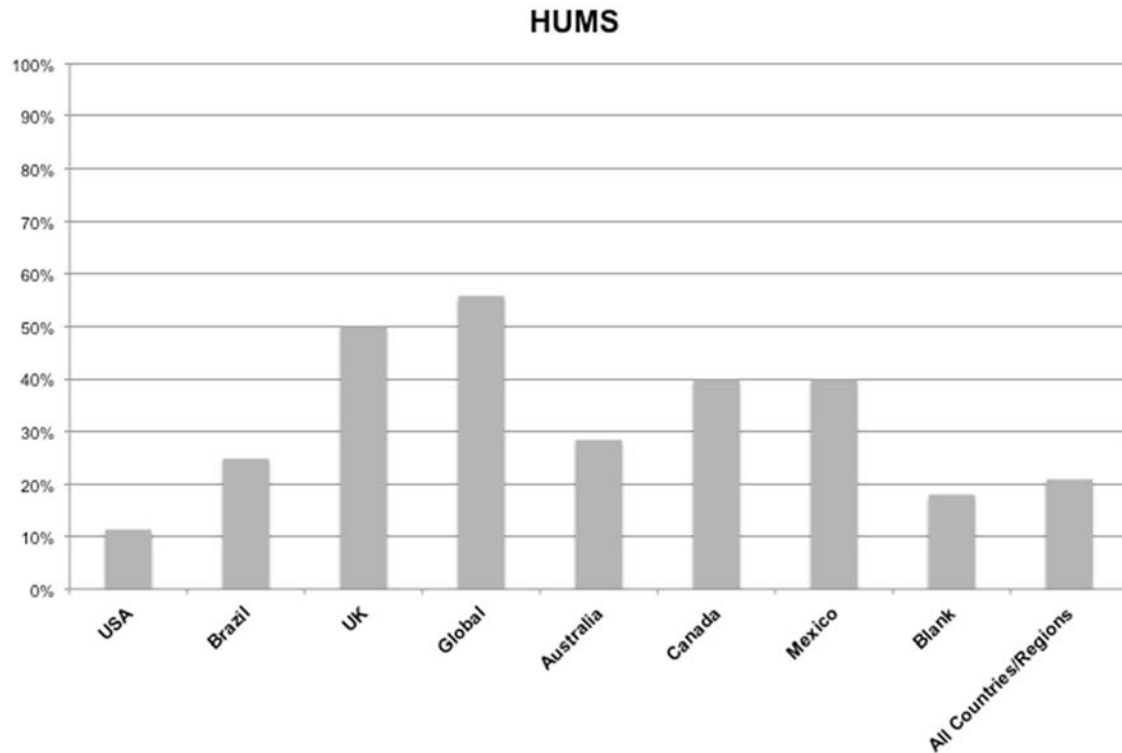
Structured programs for initial and recurrent training, often competence based, are more prevalent amongst the global operators supporting the oil & gas industry.



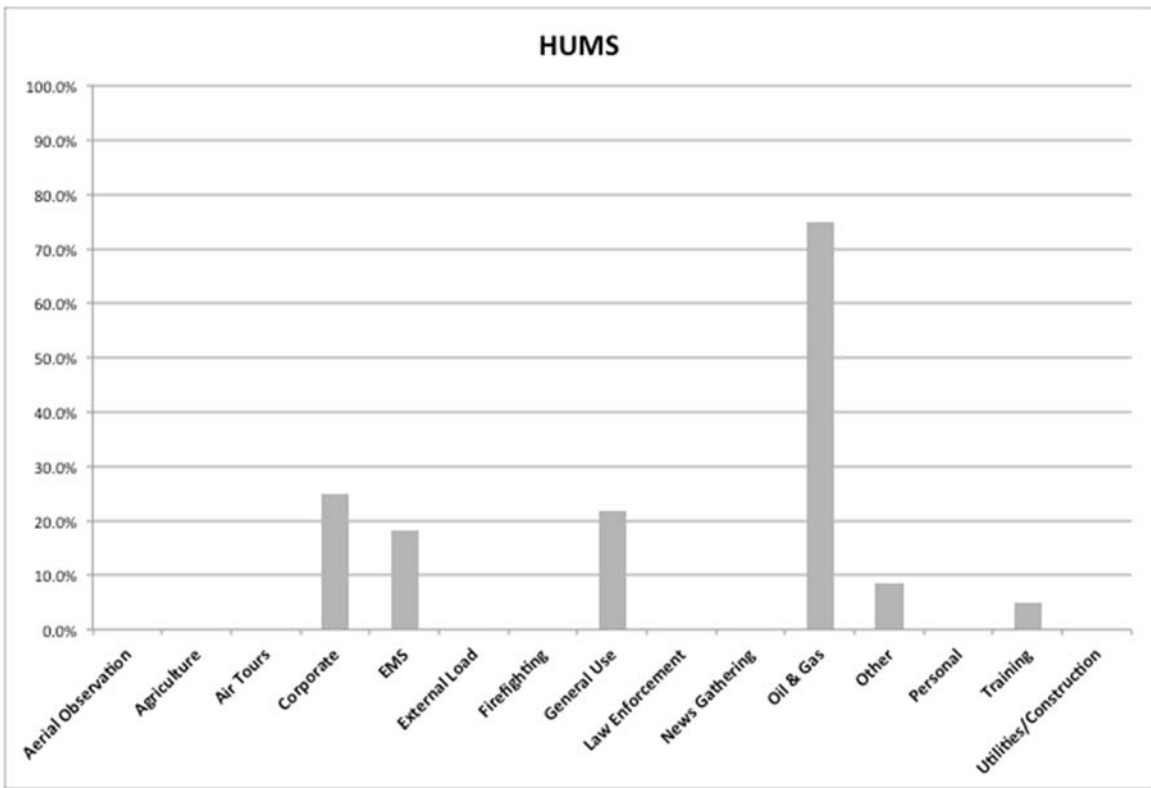
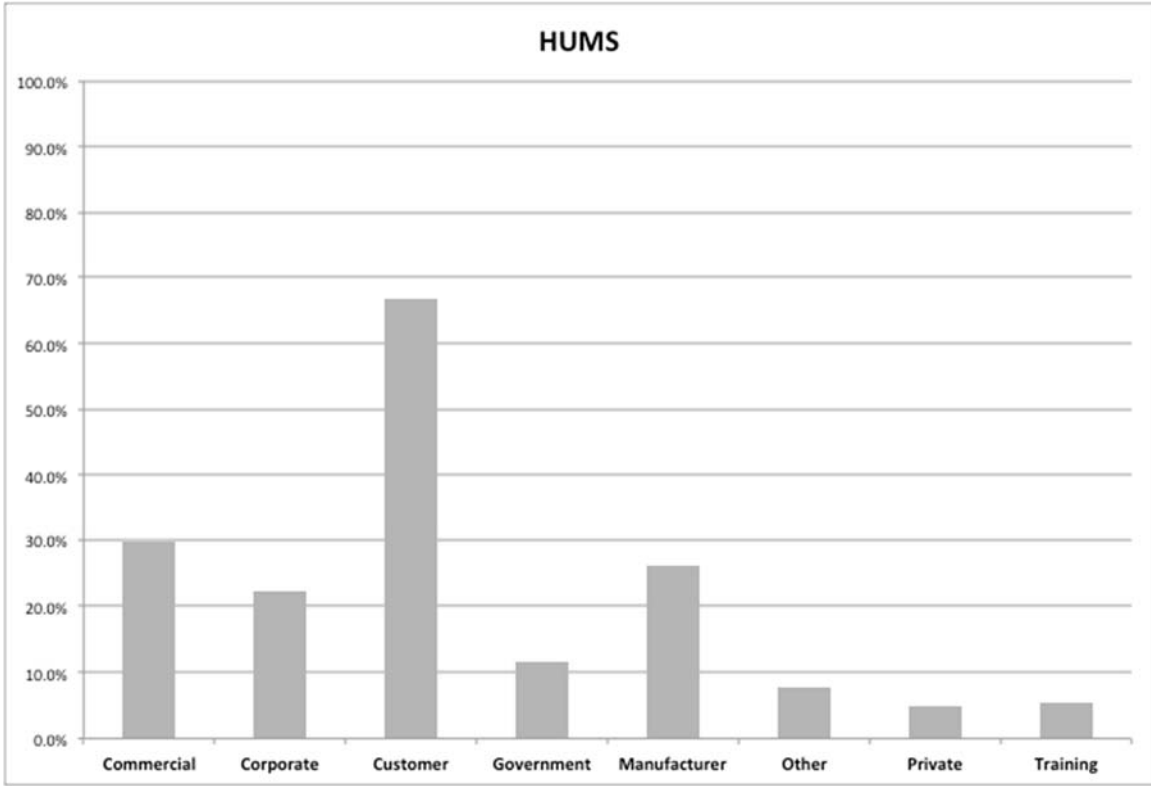
The charts below show the results by type of operation and then by use. In the first chart, as before, "Customer" results are for operations governed by oil & gas customer requirements. Also as before, please bear in mind that there was only one response from an operator involved in New Gathering.



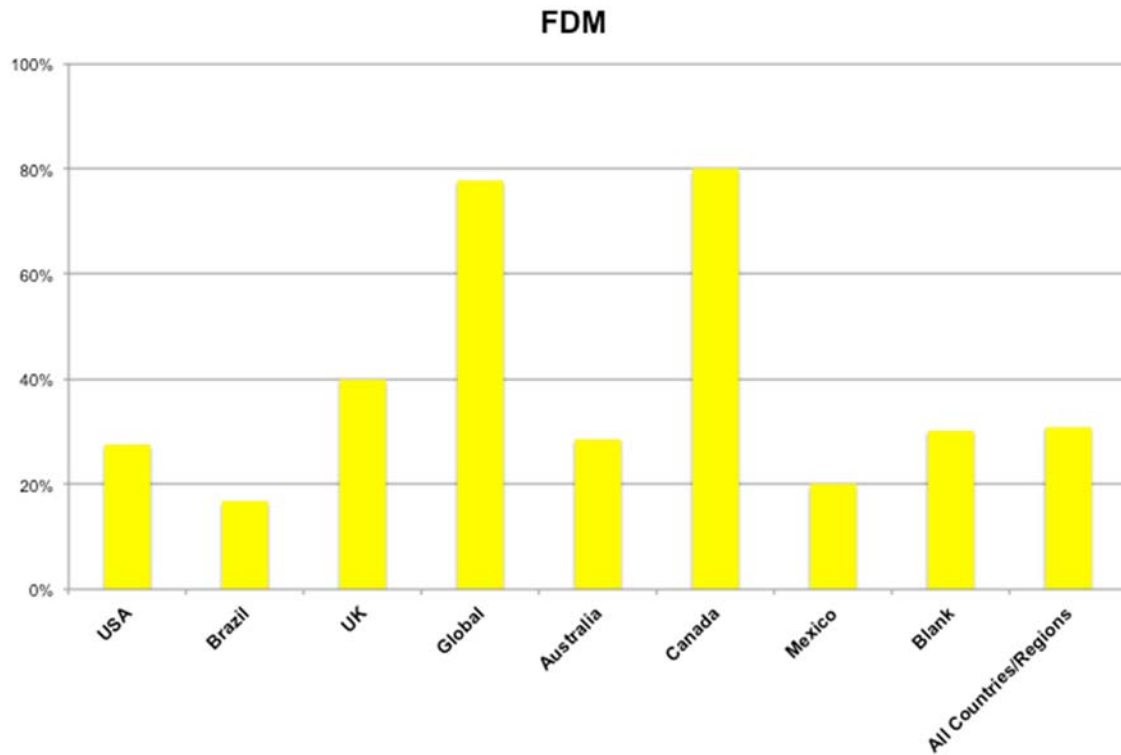
Health & Usage Monitoring Systems (HUMS) implementation is relatively low everywhere. The highest levels of HUMS implementation were reported in the UK and “Global” where the oil & gas industry sponsored HUMS development in the late 90s and many oil & gas companies have required it for more than 10 years.



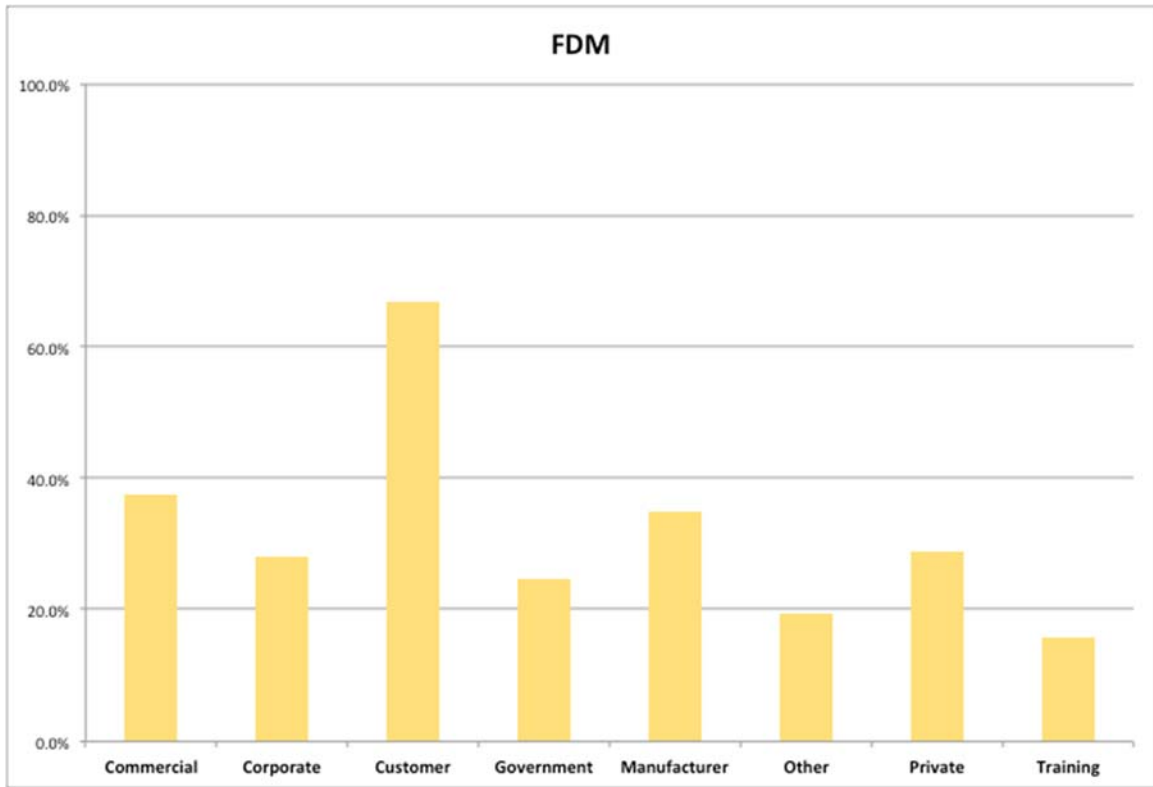
This point can be seen clearly in the chart below, where “Customer” responses are from operations governed by oil & gas customer requirements, as well as in the second chart below where “Oil & Gas” support is one of categories of helicopter uses. These results are a testimonial to the value of HUMS because these oil & gas companies are under constant, competitive pressures to reduce costs, even when oil prices are high. These companies wouldn’t pay extra and give up a bit of payload capacity if HUMS didn’t pay for itself by enabling cost-effective troubleshooting and preventing the high costs of breakdowns.



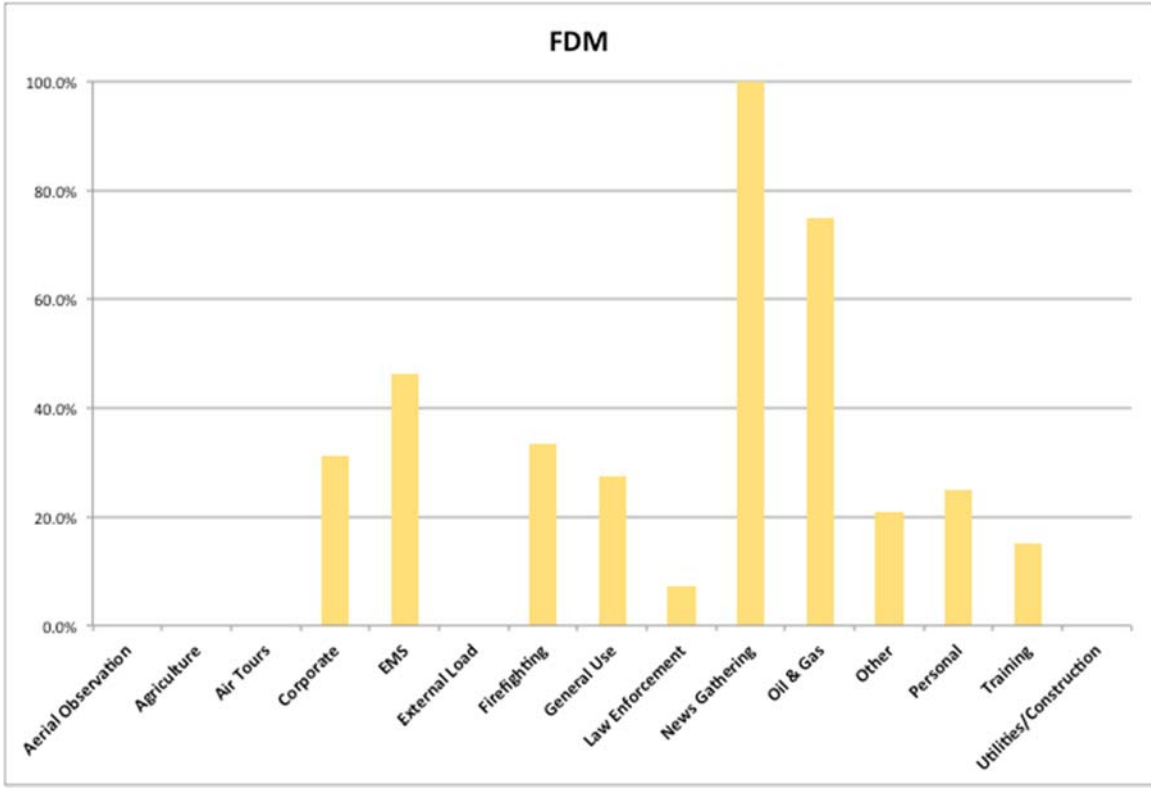
The highest use of FDM was reported by the “Global” operators and in Canada, where the advocacy of Paul Spring, President of Phoenix Heli-Flight, may have influenced smaller commercial operators to implement FDM.



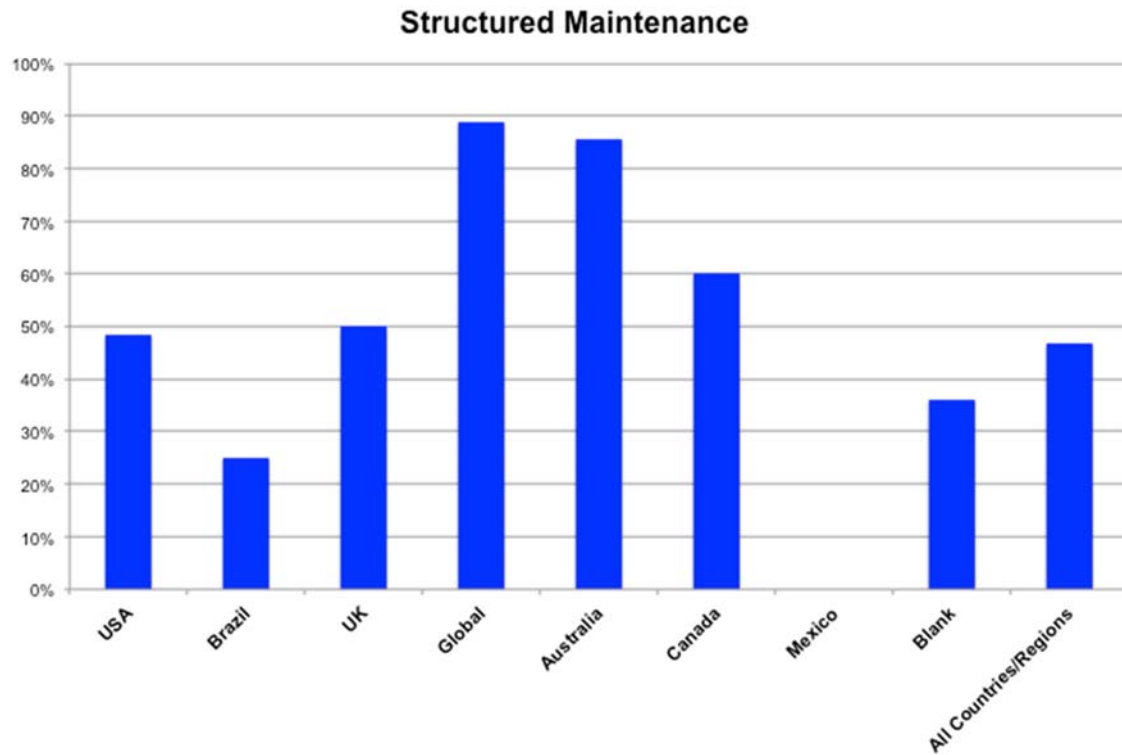
As we've seen before the use of FDM is greatest in operations governed by oil & gas customers.



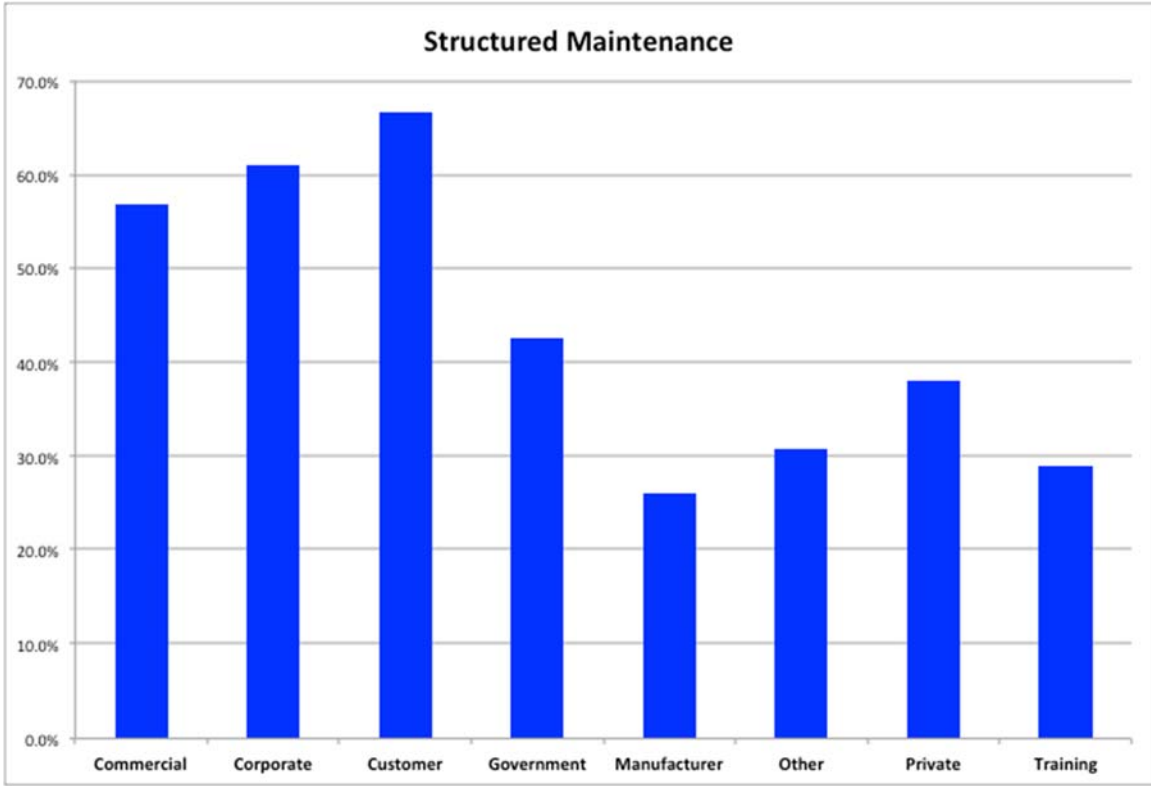
Also as before, bear in mind when looking at the chart below that we had only one survey response from an operator involved in News Gathering.



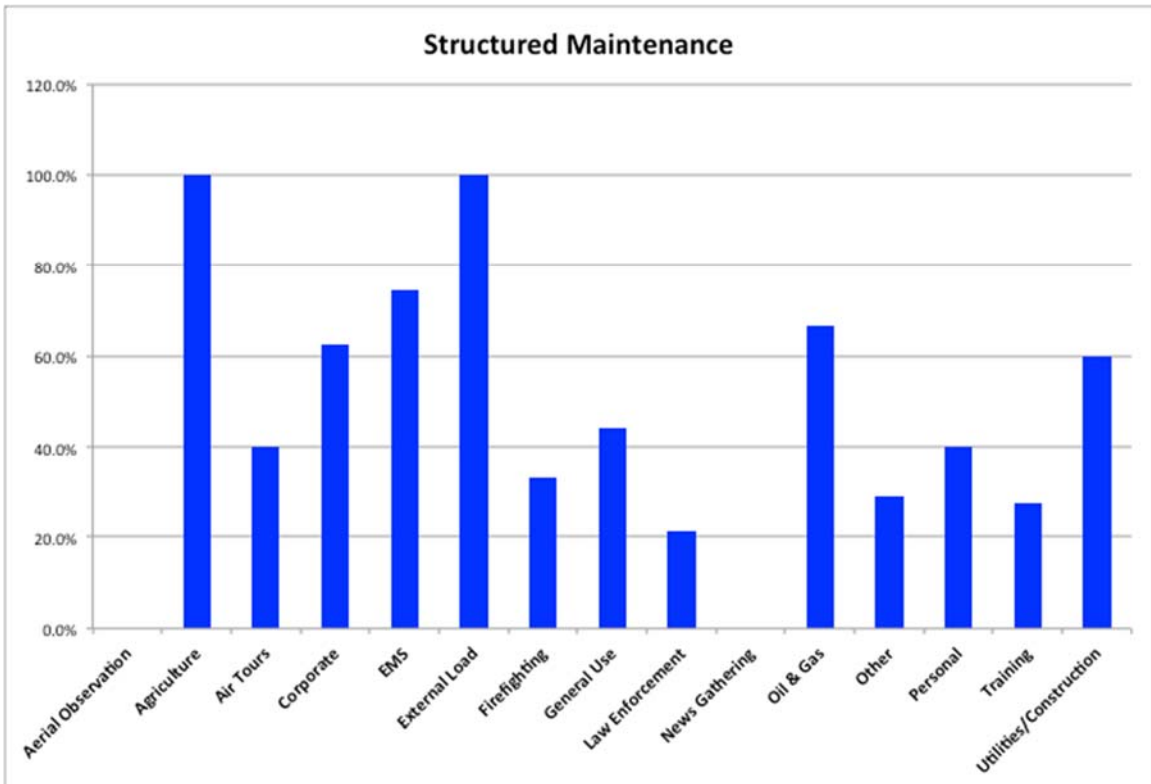
The “Global” operators supporting the oil & gas industry also reported the highest use of structured maintenance programs that comply with manufacturers’ recommended practices.



When looking at the use of structured maintenance programs, we see that commercial operators, corporate operators and those whose operations are driven by oil & gas customers score the highest. Surprisingly, the manufacturers, upon whose recommended maintenance practices such programs should be based, score the lowest. Perhaps the 10 different manufacturers’ respondents didn’t understand the question.

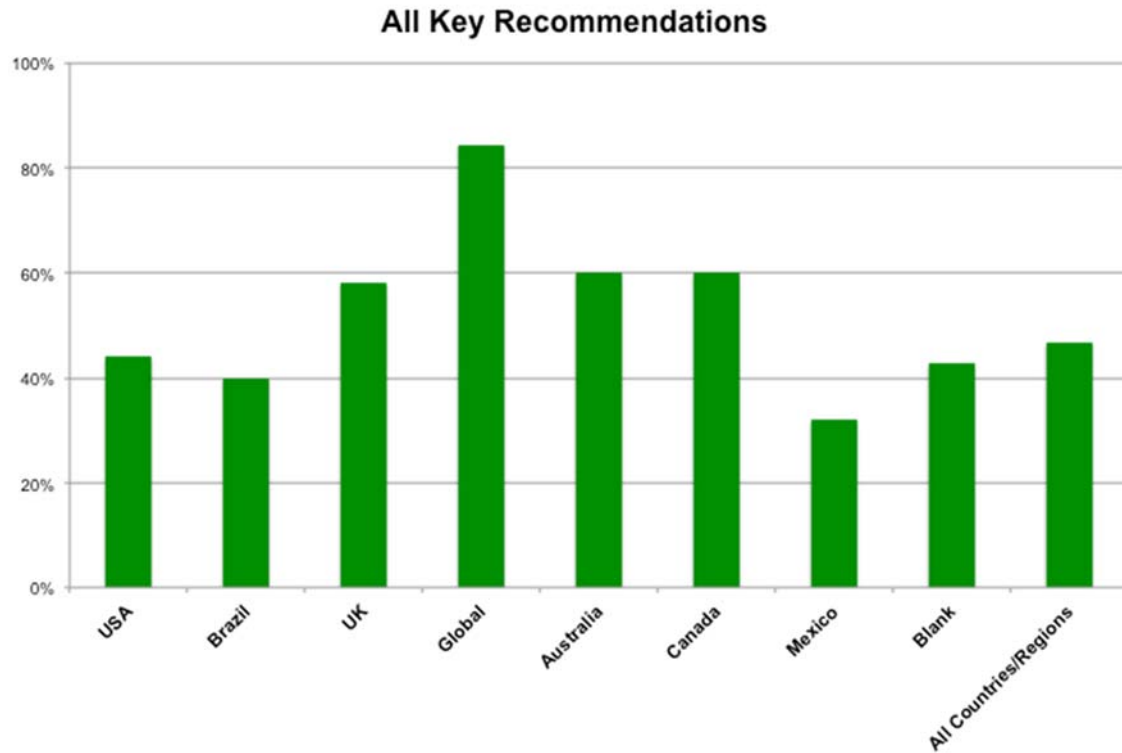


Here's the use of structured maintenance programs when breaking down the responses by helicopter use.

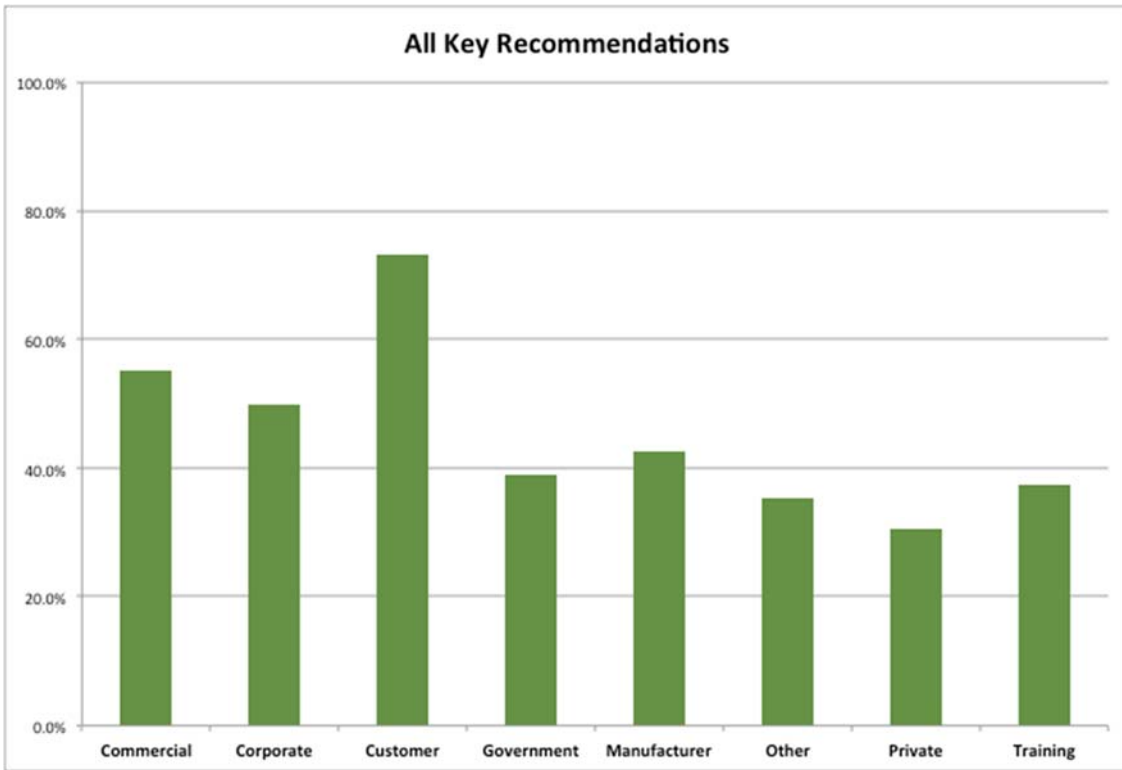


Bear in mind again that there was only one respondent involved in Agriculture and only two respondents involved with handling External Loads.

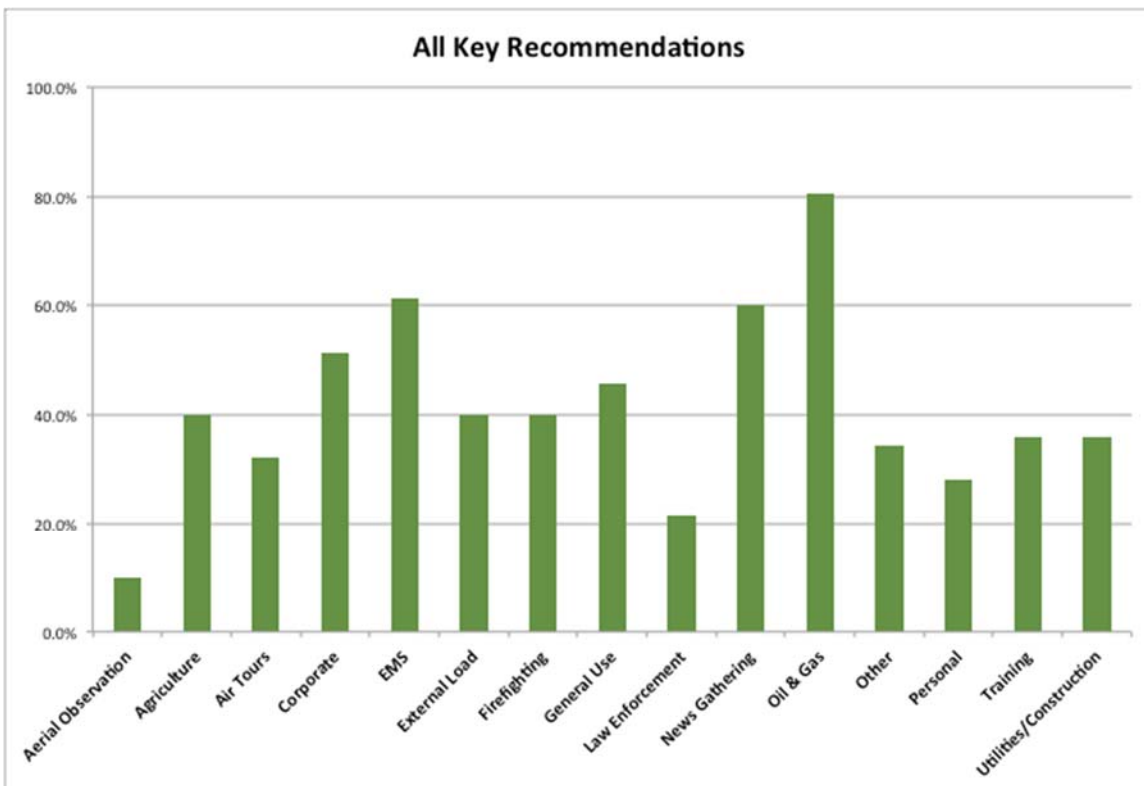
Overall, the “Global” operators reported the highest implementation of IHST recommendations and Mexico the lowest.



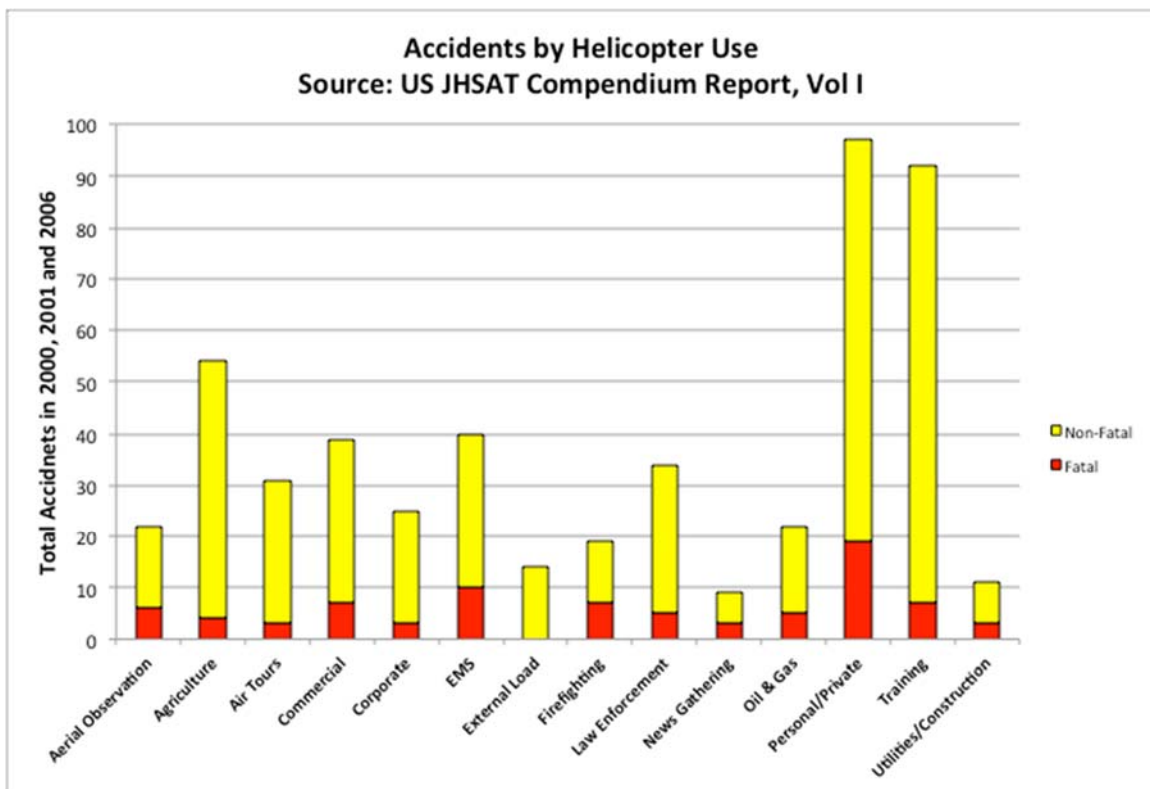
When we look at break down these results by type of operation, we see that those operations driven by oil & gas customer requirements had the highest level of implementation of the IHST’s key recommendations, while private operators had the lowest.



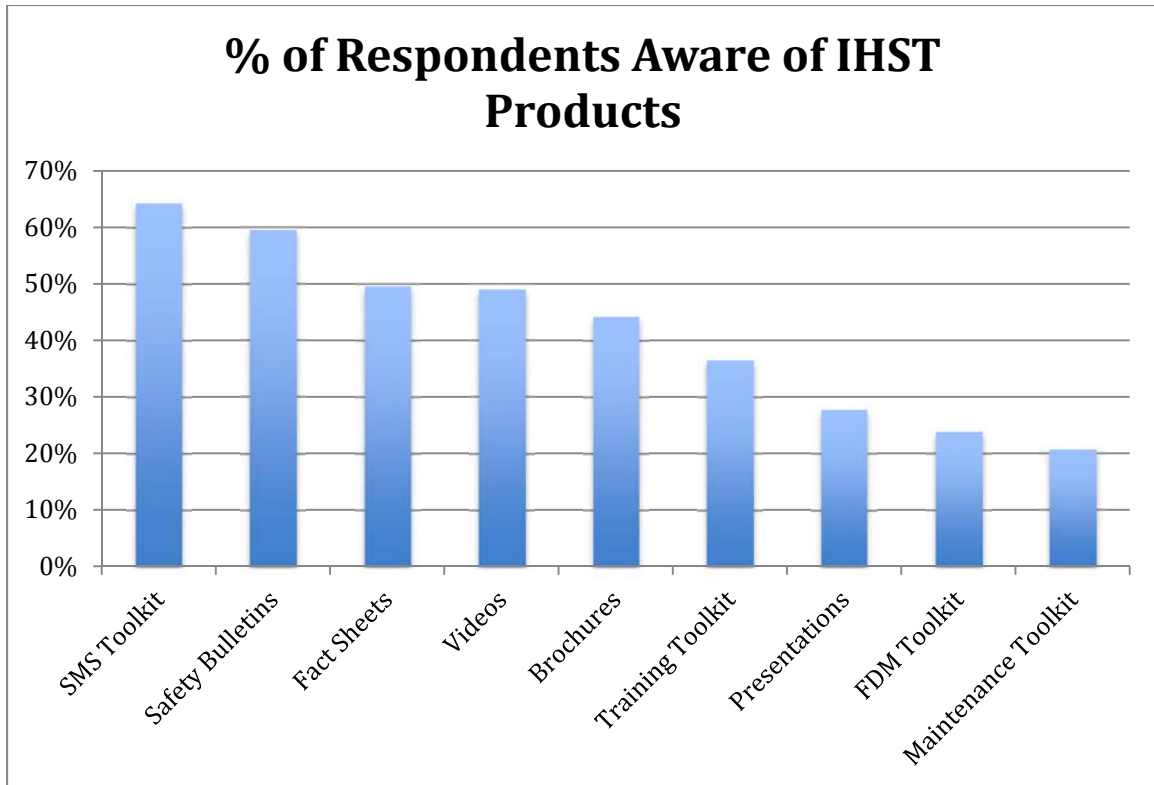
Breaking down the overall implementation results by type of helicopter use shows a similar result in that the oil & gas industry had the highest level of implementation.



The result that Private operators for Personal use have the lowest level of implementation of the IHST’s recommendations, together with accident data from one of the IHST’s analysis teams suggests that the Personal/Private operators have the most to gain from implementing the IHST’s key recommendations. The chart below is based on the U.S. Joint Helicopter Safety Analysis Team’s Compendium Report: Volume I, and shows an accident count, not an accident rate. Commercial operators, especially those supporting the oil & gas industry and those involved in training tend to fly lots of hours on each of their helicopters every year. Hence, if we could convert the accident counts in the chart below to accident rates (accidents per flying hour), the Personal/Private column would stand even more above the columns for the other helicopter uses.



To evaluate how much impact the IHST’s products (toolkits, brochures, videos, etc.) may have had on these results, the survey asked whether respondents have used or at least seen those products. As shown in the figure below, the IHST’s most popular products were the SMS toolkits, which had been read or used by 64% of those who responded. In comparison, 67.8% of respondents reported having implemented an SMS in their operations.



In every case, the implementation of the IHST's top recommendations was slightly higher than the use of the corresponding toolkits. Thus, as noted earlier, it is clear that other factors are encouraging operators to implement SMS, structured training, FDM, HUMS and structured maintenance programs.

Whatever the causes for implementing these helicopter safety improvements, the survey results are encouraging, particularly amongst the global operators who support the oil & gas industry. Please share and discuss these results with your friends and encourage everyone in the helicopter industry to study the IHST's work.