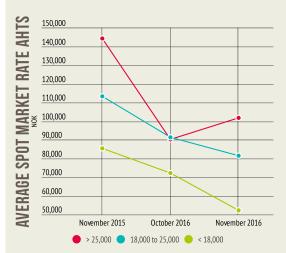
MANGATOR





SPOT MARKET SPOT MARKET 04 05



45.2%

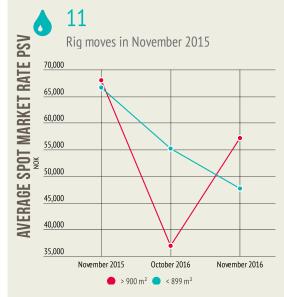
Average AHTS utilisation in November

79.3%

Average PSV utilisation in November

	October 2016	November 2016	October 2016	November 2016	
Number of supply spot fixtures	91	91	71	80	
Number of AHTS fixures	50	38	48	43	

Rig moves in November 2016





NOVEMBER

location.

ovember was a slow month all round on the spot market. The low activity level is now stretching out months beyond what most of us expected resulted in another wave of vessels heading into layup. Another seven AHTS and eight PSVs went into layup over the course of November but despite the drop in number of vessels trading, the day rates failed to pick up. For the AHTS vessels some vessels went weeks without work and when a job came along the rates were consistently sub - GBP 10,000. Ocean Patriot was moved twice during the month as it is currently working on a plug and abandonment programme for Shell UK. The quick turnaround between wells may be a positive sign in the future as more operators take on rigs for P&A work and vessels are required to move the rig to the next

For the PSVs November had an above average number of supply vessel fixtures but the slight boost in activity was not enough to boost rates. Though utilization was almost at 80% on average over the month, and particularly over in Norway where for a good bit of the month there were very few vessels available, confidence in getting the next fixture for your vessel, kept rates depressed. At times over the month there was little reason for (particularly in Norway) rates to be as low as they were, the only real explanation was the prolonged period of low rates and little expectation that they should climb to any



32.1%

Average AHTS utilisation in December

79.9%

Average PSV utilisation in December

	November 2015	December 2015	November 2016	December 2016	
Number of supply spot fixtures	91	84	80	72	
Number of AHTS fixures	38	43	43	20	

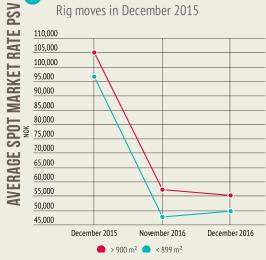
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Rig moves in December 2016



15

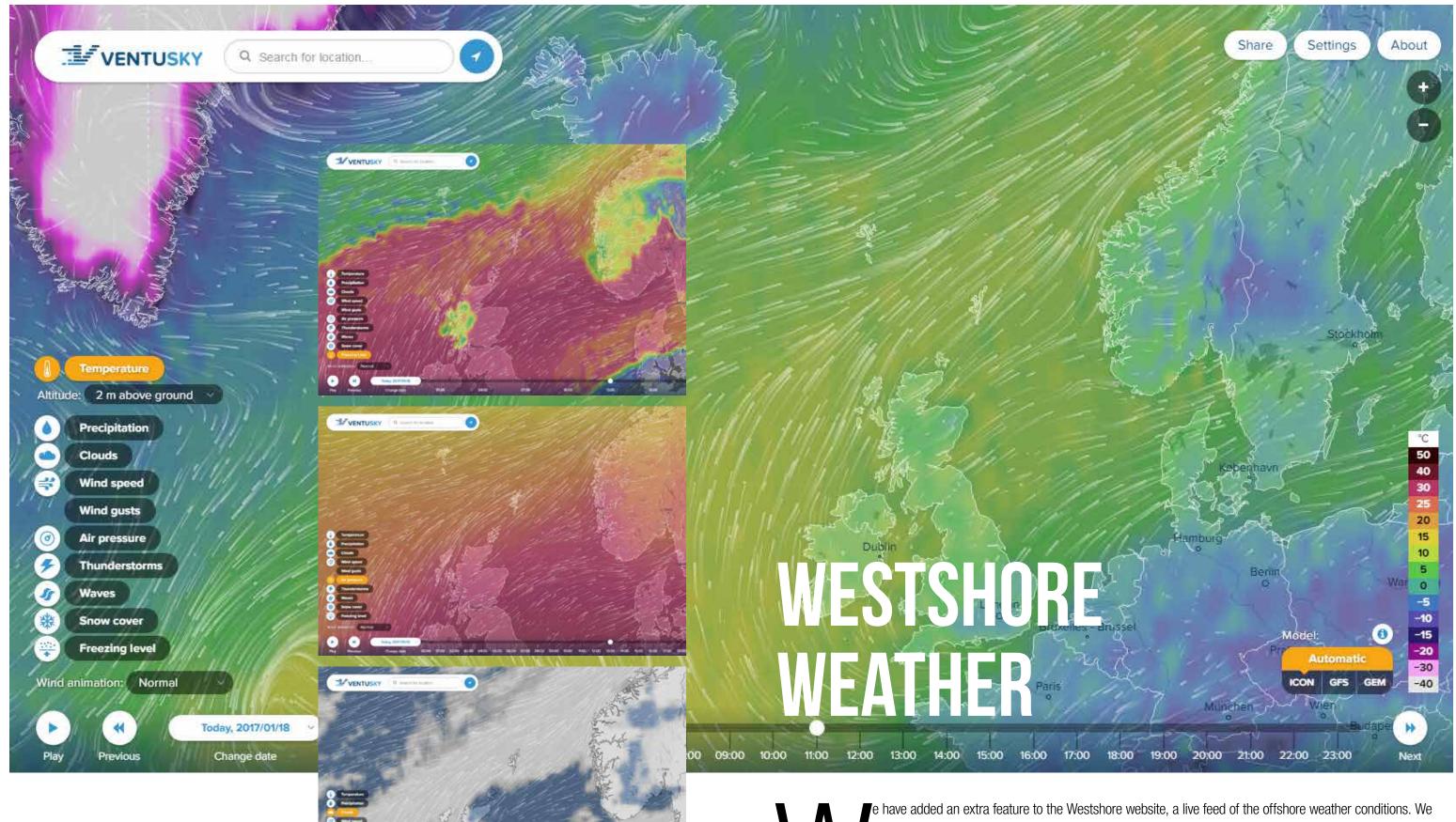
Rig moves in December 2015





DECEMBER

he decline in activity reached an unprecedented low in December with just 20 AHTS spot fixtures. That's lower than any month over the last decade. A further three vessels went into layup leaving around 25 vessels trading the spot market between UK and Norway. Rate wise weather complications failed to provide those all-important bottle necks which mean rates shoot up. Bad weather was certainly a feature of December but when weather windows opened up, there were just too few rigs that needed to be moved in relation to the amount of available tonnage. So not bottle neck and no spike in rates. A fairly flat month for the PSVs, steady activity in comparison to November with the number of fixtures and average utilization showing little change. Similar story for the rates as supply duty fixtures came in fairly consistently at around GBP 5000. The year rounded off with little hope for a quick turn-around in fortunes for offshore vessels and a further nine went into layup.



e have added an extra feature to the Westshore website, a live feed of the offshore weather conditions. We have collaborated with an external meteorological company that provides a service predicting the weather offshore around the globe over the next ten days. Information regarding wave heights, wind speed, storms, snow cover and cloud cover is available free of charge via the link. No log in details or sign up agreement is needed. Check it out and see if you can stare at it for five minutes without needing a nap.

WESTSHORE'S MONTHLY NORTH SEA REPORT We take a look at what's in store for this year A look back on the North Sea's annus horribilis WESTSHORE

2016 in Numbers

As we predicted a year ago, 2016 turned out to be particularly brutal year for offshore support vessel owners. Here's a snapshot of the year in figures.

whole of 2016



This compares to 284 in 2015, around a 20% reduction in the number of rig moves carried out. In some months, July for example, the market was fairly busy. This was unfortunately due to a long list of rigs coming off contract and moving into port for layup. Although this resulted in a temporary source of work for vessels, ultimately it was another rig off the lists for future work.



North Sea rigs in layup by the end of 2016

And 36 of them went into layup in 2016. The worst of the decline was felt in the second half of the year and the list of rigs rolling of contract accelerated. Again for the AHTS vessels this provided a temporary source of work to move these units into port, but ultimately it resulted in a deathly quiet winter as so few rigs remained out working. December 2016 had just 11 rig moves over the course of the month and only 20 AHTS fixtures.

11

2016 IN NUMBERS

duties/cargo run fixtures done in 2016

In 2015 the number of PSV fixtures done on the spot market reached record highs, our records show 1077 individual fixtures were done, not including extensions. The reason for the record activity levels came from the reduced number of vessels operators had on term contracts. So while the number of vessels working on term contracts steadily declined over the course of the year, the need for logistical support to and from rigs and platforms was supplemented from the spot market. Unfortunately this dried up in 2016 as the number of fixtures dropped back down to 2011-levels.

Number of North Sea PSVs that went into layup (and are still there)

Although a handful of vessels were lucky enough to secure contracts and only spend a brief period of time in layup, most are still lying idle. At time of writing there are currently 50 North Sea PSVs that went into layup in 2015 and are still there. This means there is a large portion of vessels that have been now out of service and in layup for well over a year. For operators considering contracting term tonnage, a vessel having been out of service for a significant period of time will be of les interest to one that has continued to stay in work. The question is how much less interest?

604

Total number of AHTS fixtures done during 2016

This was down from 817 in 2015 and a good illustration of how the market was being pressed to use fewer vessels and for shorter durations where possible. Of course not all AHTS fixtures were in respect of rig moves but in the case of pre-lays, the downward trend in the number carried out was also evident here. Just 30 rigs were pre-laid in 2016 compared to 51 in 2015*

Number of PSVs still working on term contracts in the North Sea by the end of 2016

The problems faced by offshore owners were two fold — huge drop in demand and total over supply of vessels. While term contracts for vessels were consistently renegotiated and day rates whittled down, those contracts coming to an end were in many cases not re-tendered. At the height of activity, there were as many as 186 PSVs working on term contracts in the North Sea (July 2014). So in the space of two and a half years the number of vessels on term contracts had dropped 40%.

2017 in Numbers

Looking back is easy to do, but here are our estimates for how the market will look in a year's time.

IMAGE - ADRIAN HJORTEN PAULSEN @ AHPAULSEN

240

Number of rig moves done during 2017 (up from 224 in 2016)

The rig contract picture as it stands today shows less rigs on hire in total over the whole of 2017 than it did in 2016. But the fact that the price of contracting a rig has fallen as much as 70% in some segments cannot be underestimated. Several rig tenders are out at present which will bump up the picture of rigs on hire. A handful of new rigs will arrive in the North Sea, namely Statoil's two new jackups Askepott and Askeladden and AkerBP's new Maersk jackup the Maersk Invincible, all three are set to arrive during 2017. There have been a handful of contract awards which will see rigs come out of layup and start work, West Phoenix going back to Total on the UK side, Deepsea Stavanger starting with Wintershall in Norway and Island Innovator out of layup and off to work with Lundin to name a few. So although the firm contracts are still behind last year's levels – there are signs that will change. Our tentative estimate is a slight increase overall on last year's activity.

646

Number of AHTS fixtures done during 2017 (up from 604 in 2016)

As with the number of rig moves for this year, we estimate that this will be marginally up on 2016. It is likely that is will be as a result of a slower start to the year but picking up in the second guarter and gaining pace in the second half of the year producing an overall slight increase in fixtures. It will be interesting to see how this impacts on rates on the spot market. A new urgency has been placed on several IRM work scopes that were put on hold over the past two years – this will require vessel support effectively soaking up more spot tonnage than we saw last year. If you couple this with more rig activity there are signs of hope that the summer months could yield more high points than we saw in 2016.

15 MARKET FORECAST

39

North Sea rigs in layup by the end of 2016 (62 at the end of 2016)

A reduction of rigs in layup is expected. This will partly come as a result of more rigs finding work and coming out of layup to go out and drill. But on the other hand the reduction in the layup tally will also come in the list of rigs being scrapped increasing. Despite the dire market conditions the rig owners faced last year only a small handful of North Sea rigs were actually scrapped. Some of the more familiar names – Transocean Legend, Transocean John Shaw, Transocean Winner, Sedco 704 and GSF Arctic III. Of the current list of 62 rigs that are either warm or cold stacked in the North Sea, 32 of them are 30 years old or older. New announcements from the rig owners regarding scrapping of older units has slowed in recent months – presumably many are banking on an upturn coming before scrapping becomes inevitable. Meanwhile three if not four of the Dolphin rigs will likely be scrapped and two of the Songa units. Aside from these units the question will then be, how well have these stacked rigs been preserved? Are they in a fit state to return to service or will the investment involved in reactivation prove too great a cost?



Number of supply duties/cargo run fixtures done in 2017 (down from 848 in 2016)

We are estimating a decrease in spot fixtures done for cargo work, albeit slight. The key factor here will be more effective usage of supply tonnage. Pooling resources between fields or potentially operators could result in a reduction of fixtures. Increasing efficiency has been a major element of this downturn and how the future will be shaped — at least in the short term. This being the case if a vessel can be used to supply a few fields located in the same region by better communication between the platforms or operators, fewer vessel fixtures will result although individual fixture length would increase.

130

Number of PSVs working on term contracts in the North Sea at the end of 2017 (up from 112 at end of 2016)

The worst of the cuts are over, this was followed by a stormy period of reorganization where operators worked out where they needed to be. Which assets were core business areas and which were surplus to requirements — the same philosophy applied to the demand for vessels. Now the fruits of that period of reorginisation are starting to show, the drastic reduction in the number of vessels on term charter will not remain as low forever. As activity starts to ramp up, new projects get the go ahead and construction of new fields both oil and gas and wind will require more term tonnage.

20

Number of North Sea PSVs that go into layup in 2017 (53 during 2016)

They will come from vessels that are coming off term contracts and have little alternative than to head into layup as the spot market will not have enough activity to support the number of vessels that could come off term contract in 2017. In the summer of 2016 as vessels came off term contract the tendency was to try the spot market for a period before concluding it wasn't profitable to remain there and subsequently heading into layup. This will not be the case in 2017 as the lesson was already learned last year. The spot market as an alternative source of income following the conclusion of a term charter does not hold water for long. Market balance on the spot market in 2017 will be heavily dependent on those vessels coming of term contracts not entering the spot market and either finding alternative term work or heading into layup.

IMAGES - ADRIAN HJORTEN PAULSEN @ AHPAULSEN





"After several years of high exploration activity, 36 exploration wells were drilled in 2016, 20 fewer than the preceding year

Historically, in times such as these, oil companies are more cautious and prioritise exploration in familiar/mature areas where discoveries are more likely – but often small discoveries – where the resource potential is high, but the probability of discovery is lower. 2016 has therefore seen considerable exploration in areas near existing fields, and many, but smaller discoveries have been made.

Of the 36 spudded exploration wells, 28 are wildcat wells and eight are appraisal wells. With 12 spudded exploration wells, Statoil has drilled the most in 2016, followed by Wintershall with seven and Det norske oljeselskap (now Aker BP) with five.

Eighteen discoveries were made on the Norwegian shelf in 2016, one more than in 2015. Exploration activity is greatest in the North Sea, where a total of 14 discoveries have been made. Two discoveries were made in both the Norwegian Sea and the Barents Sea."

BENTE NYLAND

Director General, Norwegian Petroleum Directorate

21 DRILLING & PRODUCTION

2016 IN FIGURES

80 fields in production

7 fields under construction

- Johan Sverdrup start up 2019 (Statoil)
- Gina Krog start up 2017 (Statoil)
- Hanz start up dependent on process capacity (Aker BP)
- Maria start up late 2018 (Wintershall)
- Martin Linge start up late 2017 (Total)
- Aasta Hansteen start up late 2018 (Statoil)
- Flyndre start up scheduled for 2017 (Maersk Oil Norge)

4 fields shut down – Varg, Volve, Jette, Jotun Disposal decisions made for Varg, Skirne, Atla, Ekofisk 2/4 C

and Tor 2/4 E, Jette and Jotun

5 new PDOs submitted

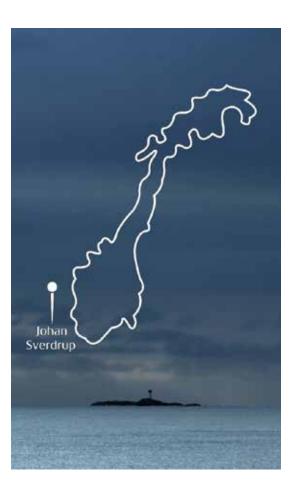
- **Dvalin** (DEA) gas discovery which will be tied back to Heidrun. Start up 2020
- **Trestakk** oil discovery to tied into Åsgard A (Statoil) start up in 2019
- **Byrding** Statoil, tied back to subsea template at Fram. Start up late 2017
- Utgård Statoil start up 2019 tied back to sleipner
- Oda Centrica start up 2019 tied back to Ula

Fields for which the PDO is expected in the next year or so

- Johan Castberg
- Pil
- Snefrid
- Skarfjell
- Snorre 2040.

o for those that went out and drilled in 2016 the name of the game was play it safe. Drill near where oil and gas has been found before, higher probability of a find but chances of spudding the next Johan Sverdrup arguably lower. Will the oil companies' attitude towards risk be greater in 2017 – particularly in light of the new found appetite for drilling in the Barents

The forecast as it stands right now is for fewer exploration wells to be drilled in 2017 than there were in 2016 and reduced investment in exploration too. This is then forecasted to pick up in 2018. The Petroleum Directorate stressed the need for replacing the reserves that are being produced, and in addition the need for a range of innovative companies and individuals to take an interest in oil and gas exploration in Norway in order to secure a future for the industry.



VV MINI MATRIX MONTHLY CHANGE

16 JAN 2017

YEAR OF BUILD	LARGE PSV	MEDIUM PSV	SMALL PSV	SUPER AHTS	MEDIUM AHTS	SMALL AHTS	DRILLSHIP	SEMI-SUB	JACK-UP
		DWT			ВНР			FT	
2017	-2.0%	-5.3%	-6.1%	+0.4%	+1.0%	+1.0%	-3.5%	-3.5%	+1.6%
2017	5200	3600	1700	24k	8200	5500	12k	12k	400
2012	-5.3%	-8.9%	-9.2%	+1.3%	+1.5%	+1.6%	+0.3%	+0.3%	+1.7%
2012	4800	3300	1700	24k	8000	5200	10k	10k	375
2007	-5.8%	-9.1%	-10.5%	+1.5%	+1.2%	+1.0%	+0.3%	+0.1%	+0.7%
	4800	3300	1600	24k	8000	5100	10k	7500	375
2002	-6.5%	-9.6%	-11.0%	+2.3%	+1.6%	+0.9%	+0.3%	-0.2%	-0.4%
2002	4700	3100	1600	24k	8000	5000	10k	7500	375
1005	-8.0%	-9.9%	-10.8%	+2.5%	+0.0%	+1.4%	+0.3%	-0.3%	-1.5%
1997	4700	3100	1200	19k	8000	4800	8500	6000	350
1992	-10.2%	-11.3%	-13.1%	N/A	+0.0%	+0.0%	N/A	-1.0%	-2.6%
	4600	3100	1200		7200	4800		6000	300

Vessels Value Monthly Valuations NOW COVERING

"PSV values have softened this month due to the sales of the Island Express (3,200 DWT, Nov 2007, Vard Brevik) and Island Earl (3,200 DWT, May 2008, Vard Brevik) to PSV Opportunity from Island Offshore Management in an en bloc deal worth USD 11.8 mil. VV value on D.O.S at a combined total of USD 12.3 mil. Meanwhile, AHTS values have remained stable due to a lack of SnP activity within the sector.

NOW COVERING MODUS

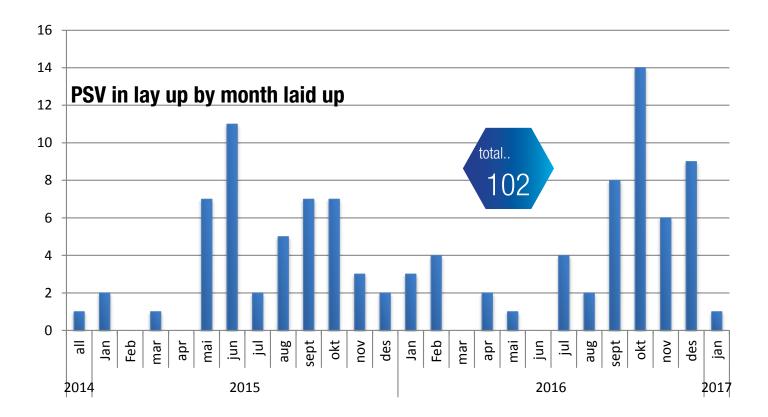
MODU values remained stable over the last month, with limited SnP restricted to Jack Ups. The on order Jack Up, Paraiso II (400FT, Dec 2017, Keppel Fels) was sold to 361 Projects Pte Ltd by Keppel Fels. Rowan offloaded the Rowan Gorilla (328FT, Dec 1984, LeTourneau) to an undisclosed buyer."

For more information contact

+44 (0) 203 026 5555 info@vesselsvalue.com vesselsvalue.com



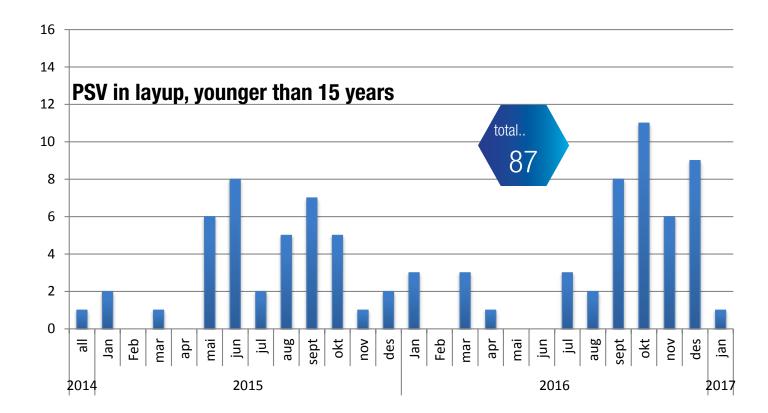




LAYUP ANALYSIS

ith over 150 PSVs and AHTS from the North Sea market laid up, the oversupply situation seems a long way from being in balance. Scrapping among offshore vessels is fairly rare, due to the relatively small amount of steel - the value comes from equipment rather than simply its weight in steel. But nevertheless the question of how many of these vessels will actually be reactivated and return to active service is increasingly under scrutiny. The Westshore layup list is available in full on our website, where you can see all vessels that we have listed as laid up and the date they went into layup. The definition of layup can vary, from warm to cold with several options in between. Secondly what constitutes a 'North Sea' vessel can vary too — we have taken vessels which have traded in the North Sea over the last decade and/or are owned by North Sea players.

25 VESSEL NEWS



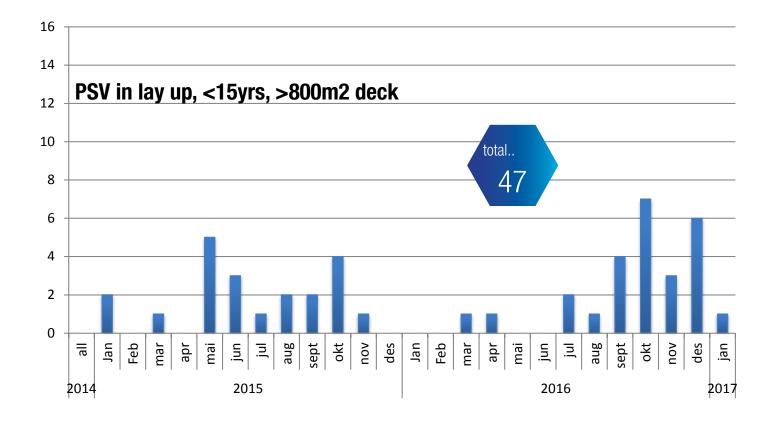
At time of writing there were 102 PSVs in layup as per the previous definition.

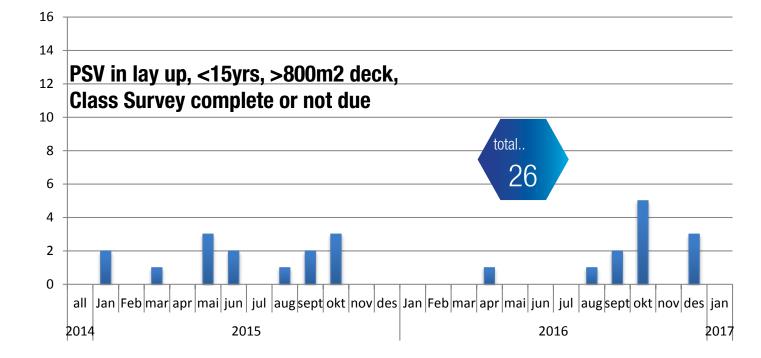
Of the 102 vessels currently in layup, 87 are younger than 15 years. Vessels of 15 years and older are in many if not most cases not necessarily at the end of their working lives and a well maintained vessel can have decades of service left. However particularly on the Norwegian side, age restrictions might make this a tough sell when the market picks up. It will be some time before we are in a situation where there is more demand for vessels than there is supply of vessels — meaning the older tonnage will struggle.

Of the vessels in layup younger than 15 years only 47 of them have a deck larger than 800 m2. Again this is an issue which impact more on the Norwegian side as the smaller decked vessels can secure contracts on the UK side

more easily. Looking to the future, particularly for operations up in the Barents Sea, where distance from shore is a major factor, a deck of less than 800 m2 will struggle to secure work.

Of the vessels in layup, younger than 15 years and with a deck larger than 800m2, only 26 of them do not have class surveys due in 2016 or 2017. The five year class survey has been the salt added to the wound for many vessels in layup. Costs for undergoing a five year class survey come in around NOK 10m but if work needs to be done on over hauling the DP system for example, you can double that figure or more. For many owners cash flow constraints meant putting a vessel through its class survey was simply not an option during the current market conditions. And of course the vessel needs to be in class to return to service – this will put the brakes on many vessels coming back into service any time soon.





27 VESSEL NEWS

LAYUP ANALYSIS cont....

f the 102 vessels in layup, younger than 15 years, with a deck larger than 800m2 and have a class survey that was completed in 2015 or earlier or not due before 2018 — only 12 of these vessels have been laid up for less than a year. The length of time a vessel has been in layup, coupled with the state of layup it has been in (warm/cold etc.) will have a strong bearing on how quickly a vessel can come back into work — and how much it will cost to bring it back into service. As with the class survey if the cost of reactivation is too great, the only way this will go ahead is if a lengthy and profitable term contract presents itself — a rare animal in the current market.

"Costs for undergoing a five year class survey come in around NOK 10m but if work needs to be done on over-hauling the DP system for example, you can double that figure or more. For many owners cash flow constraints meant putting a vessel through its class survey was simply not an option during the current market conditions. ."

28 THE LAST WORD

