National Oilwell Varco, Inc.
Analyst Day 2018

JOE ROVIG
President, NOV Rig Technologies

[Video plays]

Unidentified Speaker: Ideas are all around us. But some of the greatest lie within. She sees things not as they are, but rather as they could be. Rethinking and questioning the conventional and established. She envisions the human and the machine. Heart and steel joined together in a dance of unparalleled craftsmanship. All to produce a seamless package of engineering brilliance. She's the maker, the builder, the creator. She is the designer. This is Rig Technologies.

[Video ends]

Joe Rovig: Wow, what an introduction. Doesn't that just make you want to run out and buy a couple drilling rigs - Ideal™ drilling rigs? I think there was a car in there, I didn't notice that, but I think there was a car in there. It's an amazing amount of work.

My name is Joe Rovig. I'm the President of Rig Technologies. As a framework to the agenda, we'll talk about the segment, give you guys a little better view of how we define the segment. We'll go in to some financials. We'll talk about the equipment and the aftermarket part of the business. We'll talk about one of the new groupings which we have within the business going forward, which is the Marine and Construction offering. And continuing on the discussions that Clay talked about, we will touch on predictive analytics and how it is going to change the way we do business.

Our vision? Helping our customers achieve success the most advanced equipment supported by the best people in the industry. It's about making our customers successful, that's what drives our decision process and drives our people in the field.

So, we have the rig equipment business, we have marine construction, and we have our aftermarket operations which are embedded in those two main businesses. We'll talk about the financials. Clay talked about it, generational re-tooling of the rig fleet.

We had 10 really great years. And then '14 came along, we were okay in '14. In fact, that was the last time we talked. '15, we were able to carry through there because we had a lot of backlog and we worked off that backlog, but the industry was already starting to see a change.

And then for our part of the business, on the capital-intensive part of our business, the real pressure point for us was 2017. And we're starting to see some improvements going forward and I'll talk in greater length about that as we go through. I think when you take a look at these numbers - and what we will highlight what's unique about what we were able to do and what we can do - it is the ability to flex.

Our ability to flex to a 12 billion-dollar enterprise over a 10-year period of time and then be faced with a revenue profile that was an 80% haircut and to be able to maintain profitability through that period of time is a testament to the leadership that was within this business.

That leadership was down right to the shop floor. We empowered the people to make the decisions on a timely basis to stay ahead of the curve. We closed over 20 facilities in that period of time and unfortunately let go 13,000 people. That was two out of three employees, while maintaining our ability to execute, maintaining margins, and being able to continue our deliveries going forward and staying profitable throughout the process. Quite a task for that team and I couldn't be more proud of them.

Flexibility. It's the flexibility to move up and down. As we resized our business and refocused it, we recognized that that was a core competency so let's not damage it. So when we consolidated facilities, we consolidated facilities into the best facility.

We upgraded machining equipment. We upgraded welding equipment. We upgrade molding equipment to the latest technologies that will leverage us going forward. We will be positioned in the up cycle to hopefully reproduce this picture at some point in time.

I love this picture. It's timeless. That's what a billion dollars of NOV drilling equipment looks like. That was a great time and it's a timeless photo which we hope to move to at some point in time.

So how do we position ourselves? We're not the lowest cost bidder. We do not provide equipment on the low bid. We're the lowest cost provider and you do that through technology. You have to keep your technology pipeline full regardless of what's happening in the landscape out there or you will be passed.

Let's talk about some of the things that we've been investing in over the period. Now the data services, we'll go into great depths about what we've been doing there. The automation is commercialized, and it is evolving. This is a huge step change for our industry.

Remote drill floor. Why does the drill floor need to be 15 feet from the well center with the technologies that we have today? It does not. And we're working with oil companies and drilling contractors on new designs that would take that and those people out of harm's way. It's not that great of a challenge.

20K [psi]. There still are some technical challenges to the industry going forward. And one is 20K. 20K has been talked for the last six or seven years. We've continued to invest in it because we

see opportunities and we're working closely with customers who have plans to utilize 20K going forward.

Increased capacity. It's all about making it bigger, faster, better, and we're seeing that both on land and in the offshore.

Okay. Let's talk about the land rigs. What differentiates us in land rig business? It's our quick delivery. We have build programs for our Ideal rigs. We still maintain that ability to fulfill a requirement for a land rig within months and not years.

We build special purpose land rigs. Clay talked about a nominal sort of 22 million dollars for an Ideal rig. He said any rig but I think it's an Ideal Rig. But we also build these large Alaskan type onshore rigs. This in and of itself is about 130 to 150 million dollars. So, it's a significantly greater cost for this technology. And today, we're building another one of these rigs which is going to the slope later this year.

Global service capability is about being in the marketplace. Not only do we have service facilities to support our installed base across the land landscape, we also have rig-up yards out in the Middle East, into Russia and within the US and Canada.

Intuitive controls of the equipment. It's all about controlling the equipment and given processes which will allow us to maximize the performance that equipment allows to give us and give the repeatable sort of performance that the oil companies and the drilling contractors are looking for.

So what is NOVOS™? It's an intuitive drilling system. We have the drilling equipment on the floor and it's controlling that drilling equipment and it's doing so within an open architecture. One of the big selling features, which Clay highlighted, is the open architecture. This is not narrowing the ability of others to play with the system and to maximize their returns. We have an open architecture that allows anyone to play with the system.

That leverages right into crowd sourcing. It's the foundation of automation. We take this, and we marry it up with our multi-machine control which is now offshore and we're getting into full automated operations going forward, taking people out of harm's way.

It provides the consistency across the fleet. If you have a fleet of equipment you're looking into consistent performance basis and we'll go into why that's happening with NOVOS later. It automates the repetitive tasks and optimizes drilling performance working with the various apps that come from third parties as well as from NOV itself.

A driller these days is quite overwhelmed. If you consider the number of screens - they'll have four, five, six screens out there trying to run a drilling rig. In the old days, there were no screens. Now there's multiple screens. He's asked to do a lot of repetitive tasks and functions on a consistent basis just to make a connection.

At the same time, this guy's probably got three or people standing around standing around him asking him questions. He now has a connection back to the office and they're calling him on his phone. He probably has radio blaring in the background from the guys down at the mud pumps.

It is a huge task for these drillers. NOVOS comes in and essentially takes all that repetitive function and turns it into a push button. This guy - the senior guy on your rig - the guy that makes it happen now has the ability to push the button and take a look at what's going on and manage the operations instead of being reactive.

That gives repeatability and increases safety and performance overall. Clay talked about the 32 apps. There are 32 apps thus far, but there's probably 33 or 34 by now to be honest. We're at a tipping point with this technology. And the apps are coming from multiple players, not only do they come from us in the wellbore group which will be talked about later but they also come from universities. They come from oil companies. They come from the majors. They come from competitors.

But does it really work? Speed, when you work on a rig, is all you talk about. How fast did you do the connection? How fast did you drill the section? How did you trip the pipe? That's what these guys are driven by, is speed.

So we went, we picked a rig that could be upgraded to NOVOS but before upgrading it to NOVOS, we said, Okay, here's the challenge, guys. We're going to track you going through repeated functions to see how long it takes you. And this crew within this grouping was the fastest that was out there.

What you'll see is yes, for some of the connections they were extremely fast. This was actually eye-opening to them as a whole because they thought they were consistent, but there were lots of things that caused inconsistencies over a period of time. We then put NOVOS in place. They pushed the button and let the system work in a standard process over a standard time period and that consistency provided the data that you now see on the right-hand side of the screen. That is what is driving the uptake in NOVOS going forward.

So how many of these things do we have out there? Well, we have sold roughly a hundred. There's 32 that are working right now, 30 of them on land and 2 on offshore rigs. So what's the scope? The scope is up to 750 that will easily plug into our operating systems on a global basis.

Clay talked about this is a proven technology. This is not smoke and mirrors. This is not something that will happen. There's over two million feet have been drilled with NOVOS and, to be honest, it's probably closer to three because this chart is at least a week or two old.

Now we will go into a little bit more granularity on rig equipment and talk about the land rig market outlook. Traditionally I don’t like charts within a chart, but I think these two are connected to each other well. Let’s you take a look at the central part of the chart which is the

three boxes that talks about 2008 and 2018. Now, these are done very generally taking a look at the number of rigs, the amount of footage drilled and just dividing it. There is not a significant amount of science in it, but for a directional understanding of where things have gone with technology, I think it does point to what we all know.

And that is the technology that's been employed in North America with the AC advanced drilling rigs provides for better than 33% improvement in footage drilled. So less rigs, more footage, we all know that, but this was just to highlight what was behind it.

Going forward, where are all the new rigs going come from? How many are there going to be? Well, based on our assumptions on the next four years, taking a look at the marketplace, we think that the marketplace needs roughly 300 more advanced AC, 1500 to 2000 horsepower land rigs.

Now, is that all going to be brand new rigs? No. We think that roughly half will be upgrades. These will be not upgrades of 25-year-old rigs. These will be upgrades of some of the early AC rigs that maybe didn't have the same amount of setback, didn't have the same pumping capacity.

There will be an upgrade part there. There'll even be an upgrade of DC rigs and we've seen that over the past few quarters and there's lots of discussions going forward. So why would you upgrade a DC rig instead of buying a new one? It's about the capital. There's a lack of capital in this business. People are trying to maximize their rig fleet by upgrading and we will be the benefit of that.

Let's take a wider look at it. And for us, North America and Middle East are two large markets for land rigs. Now generally, over that period of time, if you look globally, we think the marketplace is like needing about 550 land rigs and when I say that, that's brand-new land rigs, discounting the upgrades. Again, roughly 550. Roughly half of those rigs we believe will be purchased and utilized in North America and in the Middle East.

What have we been doing in the Middle East? Well, we went out and signed a joint venture with Saudi Aramco, the biggest player globally and clearly the biggest player in the Middle East. The JV includes building a factory in Saudi to build land rigs from crown to ground and all the rotating machinery.

Thankfully it has a ramp-up process. We are not going to start cutting chips on a brand new top drive day one, that will be over a period of time. But we have an order, which was the single largest land rig order ever given, which we noted in Q2 was $1.8 billion dollars. That's for 50 rigs over a 10-year period.

As for the facility itself, we have picked a contractor to start the work. We hope to break ground within this or the next quarter. We are looking at about a 24-month build. First rig to be delivered in 2021 is what our timeline is right now. Now, in working with Aramco as our partner,

when we were designing this facility, they said, hey, wait a minute, we need to be sure that this facility has the capability of building equipment that would also be used in jackups because we're going to build a bunch of jackups through a joint venture that we have with Rowen.

So the facility itself has been designed to build land rig componentry and full land rigs as well as componentry for jackup rigs. Now, the jackup rigs, we're going to have to win. And we're in the process of competing for that work as I speak.

[Video plays]

Taking a look at the offshore market and look at the overview there. We'll talk about this platform that was recently put into service just last April in Norway for Equinor. This project took three years to build. It was built in Norway. And some of the key things we want you to look at is look at the automation. Look at the rig floor. Look at where people are operating this equipment. That is what NOVOS and MMC [multi-machine control] in equipment layout and designs are bringing to the industry. This is not about a concept. This is real. We talk about diagnostics and the diagnostics have also upgraded going forward to where we can now diagnose problems remotely on equipment and address that problem.

[Video ends]

Okay. I'm going to go back to what Clay said. Don’t focus too much on the exact number because I read all the stuff that you guys read, and some write and numbers don’t always tie it, but the direction does. In taking a look at it on rig retirements, if you look at 2014 into 2018, we estimate there to have been 194 retirements.

You'll notice on the frontend of it the bulk of it was the semis. The semis were the most aged of the rig fleet. They were the biggest part of the last build cycle over 20 years ago, a major offshore build cycle and those took the heaviest sort of retirements.

But now you're starting to see as we move into the backend, jackups. We are now starting to see the retirements of jackups, which fundamentally is important for the health of the business going forward.

So, take that same period, 2014 to 2018, the number of offshore rigs delivered is 164. You'll see that the drillships are heavy on the frontend. The bulk of that came out of [South] Korea and out of Singapore. As we get to the backend here, you have less deliveries coming out of [South] Korea and Singapore and you have still the overhang that's coming through with the Chinese jackups.

So, what's left? There are lots of arguments about whether or not all these rigs will be delivered. What we've assumed here is that the equipment has been delivered. You may see this slide a little bit, but fundamentally we believe if there's a contract in place, the equipment has been delivered, the rig will ultimately be assembled.

Now, whether or not it finds a customer in that timeline is questionable especially when it comes to the Chinese jackups. You still see the overhang that the Chinese jackups have on the marketplace going forward and we still have some offshore floaters that are coming through the system.

Going forward, when are we going to sell a new jackup, looks like you got a bunch of them. Well, we do. When you take a look at the jackups, there are actually some newbuild orders that will be coming through that we've highlighted here - which I've already talked about - and that is the Aramco order - two rigs a year on an ongoing basis for up to 20 rigs. So, you've got those two rigs there.

You then see additional two rigs that we forecasted into 2021 and 2022 which are harsh environment large jackups that will probably be employed in the North Sea. Now, where is the utilization going to end up in 2022? Forecasting it, we think it gets close to 80%. If it gets close to 80%, we'll start to see support for increasing day rates and allow the drilling contractors to heal a little bit. But offshore for the next two to three years is going to be rough.

Floaters, kind of a similar sort of trajectory. The one thing on here is you'll see that we're talking about 250 being the fleet size. Well, it depends on who you talk to. If you talk to some of the offshore drilling contractors, they'll say yes, there may be 250 or 270 out there, but we think only maybe 220 will come back to the marketplace.

So, if you assume their view on what the real market is and the marketable rigs out there, these utilizations would be higher. But we took 250, which seemed like the middle of the road number in doing our forecast. Taking a look at the newbuild floaters going forward, there's no drillships in there.

These are semi-submersibles. For those most part they will be mid-water semi-submersibles that will be used in the North Sea.

Shifting now to Marine and Construction, which I said in the foreword was one of our new groupings. It's a new grouping, but it's utilizing products and services that we've provided for years. We have the offshore supply vessel and pipelay systems and I'll give you some greater depths as we go through here what the size of that business is. We augmented things that we already had in our product portfolio of cranes, jacking systems, and vessel designs with a venture that we now have in Italy that provides for pipelay capability.

Offshore wind farms. We've got a nice video I'll show here in a minute to give you a view of what that is. But, again, this is of a vessel and a crane that we provided and of jacking systems that were utilized. The design of the vessel was via our Gusto [MSC] Engineering House which we recently acquired.

There's another view from a Gusto concept. This is actually a design that has been sold and ultimately will be built in the coming years. When you guys are trying to understand what we're doing in our business, we took all our cranes and put them into the Marine and Construction so that we didn't have it in both sides. It is not in the rig side anymore; we've embedded it within Marine and Construction and, therefore, we're going to have intercompany. And I know you guys probably hate intercompany because we have a lot of intercompany going back and forth and sometimes it's difficult to figure out the numbers, but that's just who we are.

[Video plays]

Okay. Here's a video which is quite interesting, of the vessel that was designed by Gusto. It has our crane system on it and it has a jacking system on it. Now, it looks like an offshore jackup.

That's a crane that we designed and manufactured, and it's not a special crane; it's just about capacity. So, what's unique about it? Well, the jacking systems here are actuating on a much higher frequency, therefore, the jacking design has to be more robust.

[Video ends]

Additionally, you can have a lot of equipment like you saw on that video there on board the vessel which increases the overall weight that the vessel has to jack up and down. So, we're looking at much larger jacking systems. The other side of it is we need greater reach and more capacity craneage, which is what we have on these vessels.

So, what's the market look like for this new grouping? Well, if you look at the pipe and cable lay vessels coming forward, to kind of put some numbers on it, a pipe lay vessel is roughly 15 million bucks to us. Cable lay is a much smaller sort of operation, it’s closer to 6 million.

Offshore construction support vessels, these are the multipurpose vessels and dive-support vessels. In general, these vessels run between $3 million to $6 million of revenue potential for us.

Then we get to the wind side. The wind side is a little bit at a tipping point right now as we see a lot of RFQs coming out. And you say well, why are all these RFQs coming out? In the past, the size of the turbines didn't get larger than, say, nine megawatts. They've now designed 15-megawatt turbines that are going to be going on these offshore installations. Well, the vessels that were designed previously top out at nine. So, we're now needing to build new vessels to be able to build these larger wind farms.

Moving into our aftermarket operations. As I said, aftermarket is embedded in both of these revenue-generating business units.

The rig reactivation opportunity, we'll go on to a video here and let John Knolton of Ensco speak.

[Video plays]

Unidentified Speaker: We partnered with ENSCO to upgrade the existing rig fleet with higher performance equipment and a safer working environment.

John Knowlton [Ensco]: The market conditions when we ordered this a year ago are similar to the market conditions now, basically very, very competitive. We also saw a need to make these rigs more automated and give us some efficiencies that are really not out there with this class of rig.

Zack Stewart [NOV]: Not only can we take all the hands off the pipe and we can get fewer people on the drill floor which is less exposure to risk, we can also build and rack multiple types of tubulars, so you're talking drill pipes, drill collars, casings of just about any size up to nine and five-eighths. We can add horizontal pipe handling to the system as well. Nabil Mubarak [NOV]What you have seen is the upgraded ST-160 as opposed to the 120. You'll also see the retractable dolly on the TDS-8 and you'll also see the PRS system along with NOV's fingerboards.

John Knowlton [Ensco]: If there is any tender that requires a fully automated drill floor or any tender that requires rack and back casing that we can do it now.

Zack Stewart [NOV]: The thing that would actually differentiate the 140 and the 141 from any of the rigs that are out in the market.

[Video ends]

Joe Rovig: Well, thanks ENSCO and thanks, John. Let's talk about the rig reactivations that Clay briefly touched on in the beginning. Now, what you saw on the video was also a rig upgrade. When you bring in rigs at certain times, you will look at doing upgrades. The upgrade that happened on those jackups is they didn't have automated pipe handling. They were all manual pipe handling.

To secure contracts going forward, they needed to put pipe handling in there. So, that scope of work was done. That's roughly 3 million bucks to us.

When we talk about jackups here, there are a lot of jackups that will come in for reactivation that will also need rig equipment upgrades. But if you just focus on the reactivation activities, we're estimating roughly $3 million to $5 million per jackup and there's a market size of 80 to 140 out there through 2022.

We then shift gears and we go over to the floaters and obviously it's a much bigger drilling platform, more complex equipment and, therefore, we're looking at a much greater spend -- $10 million to $40 million. Now, to put some context in that $40 million, we recently completed a recertification of a drillship that was delivered, I believe, in 2007 and it was $40 million with no

upgrades just to go through recertification. And there's 40 to 60 of those to be done over this period of time.

Now, a lot of drilling contractors will come out and say well, rig reactivation, that's $100 million, $150 million. Well, what you need to understand -- and there is a semi that recently went through the UK that had a very large price tag on it -- is that in many cases depending on the age of the vessel, the marine systems will take up a big ticket.

The structures of the vessel will take up a big ticket. And in many cases, the [combination] is not what it needs to be and that's a big ticket. So, that's how you get to these $100 million and $150 million quoted numbers. The drilling equipment, no upgrades, roughly $40 million.

So, total cost of ownership. I'll go into that but to be honest, our biggest customer to date is Transocean. So, who better to give you more color than Transocean and Jeremy [Thigpen].

[Video plays]

Jeremy Thigpen: Transocean has been a proud partner with NOV for quite some time and this latest collaboration between our organizations the total cost of ownership program has propelled the relationship to another level. It truly is a collaborative approach that's focused on two things and it is improving uptime performance and at the same time reducing maintenance cost and having that be sustainable, not fluctuate as markets pick up or drop. So, it's good steady business that is a true partnership between the two companies.

Given the sheer number of NOV topside and subsea packages in our fleet, partnering with NOV was critical. We have seen a definite improvement in responsiveness because we're both aligned around the same objective, it's we want to keep the equipment running. The responsiveness from NOV has always been good, but it's just that next step.

So, it's across the drill floor and it's on 16 rigs. It's also the subsea BOPs and riser. And so, the most critical component on any rig for any of us is certainly the subsea BOP. That's also the spot, the piece of equipment where we have the most downtime, and so it's important that we get that one right. And so, I would say that that's our primary focus, but every component on the rig is critical and we're fortunate that NOV can provide the entire suite.

[Video ends]

Joe Rovig: Okay. Thanks, Jeremy. We partnered with these drilling contractors and we looked at the total spend for maintaining their pieces of equipment. We utilized technology to reduce the overall spend and I'm going to spend a little bit more time on this and I'll get into more granularity as we go through. This is a little bit of the secret sauce, especially when I get to the simple math on how we calculated these things.

What we're bringing is technologies that we've been developing with remote monitoring, the analytics, the onsite inspections, the onsite repairs into this calculation which then provides for not so much a greater revenue opportunity but improves our margin capabilities. It's about maximizing the equipment maintenance spend, so we'll talk about that. It's about giving the entire spend regardless historically of whether it came to us or it went to a third party.

And it's about supporting increased uptime. In many of these TCO programs, we will have a stick and carrot. But the stick and carrots that we're agreeing to are equally matched. If we agree to 95% uptime, whatever that stick and carrot on the plus or the bottom side that we agree with the customer is of the same value.

So, the unique competencies that we bring, we're the OEM. The OEM is ideally positioned to do this because they have the knowledge of the product. Leaders in remote support and we'll talk about this a little bit later as we get back to it but we're bringing technologies, the smart glasses technology into the rigs and linking the rigs with our engineering departments in real-time all the time to be addressing issues very quickly.

Real-time data analytics. It's about being able to have up to 6,000 tags on a piece of equipment that sends back a massive amount of data. And that by taking a massive amount of that data over time and going through the MAX™ aggregator we have and taking a look and coming up with trends and being able to predict the health of the equipment, so we can predict when it's going to fail so that we can stop and fix it.

Guess what else we're able to do? We are able to certify the capability of that piece of equipment and have a continuous recertification going forward on that equipment versus the five-year cliffs that we've seen in the capital industry. That's a huge cost saving to the drilling contractors and a huge benefit.

The CBM infrastructure is about the condition maintenance that I've talked about. We have total cost of ownership and we have condition-based maintenance. Condition-based maintenance, the analytics and the review falls up under TCO but it can also stand on its own two feet.

The one thing I will say in our discussions with the drilling contractors - and this will shock you - they all have a different idea. So, each one of the programs is sculptured specifically for what they want. In some of the programs we have, all they want is the condition-based maintenance. In others, they want a variation of condition-based maintenance, total cost of ownership, or in Transocean's case, they came in and we have a completely blank sheet of paper and we said what can we do to the maximum and that's the program we agreed to with them.

In-situ inspection repair. Some of you may not know what this is but this picture shows the cavity of a subsea BOP. In the past, if we had issues in and around that sealing face, that BOP would have to be taken out of service. We're not talking hours; we're talking days. And then you've got to be able to lift something that is very heavy now in to a vessel and trying to get the right sort of lifting capacity in the vessel and the logistics of moving this equipment is crazy and crazy

expensive. So, we have developed our own proprietary machining capability and tools to be able to do in-field repairs of the face and the ring grooves, which are two high wear areas on BOPS.

Now, all of this wouldn't mean anything if we weren't in lockstep with the certifying authorities of ABS and DNV. And through the last few years we have been in lockstep with both of these agencies to ensure that they support what we're doing on a go-forward basis and, therefore, will support a continuous recertificatt6ion of this equipment going forward and the elimination of cliff events which are extremely expensive in the industry.

So, how does NOV make money with TCO? Actually, Loren asked me to specifically do this chart because he's been asked this occasionally since some people think well, I'm not quite sure how you guys make money out of this deal. Well, it is simple math and to be honest, when we sat down with the customers, that's how we did it, very simple math.

So, this is over a 10-year period. We sit down, they provide their spend across that entire drilling suite for 10 years. We then take that, and we say okay, let's come up with what that is on an annual basis. In this example, it’s $10 million.

Within that $10 million, we noticed that they spent $7 million with us, $3 million with others, but what we're going to be gaining is the entire spend. But how are we going to entice them to give us the entire spend? Well, we give them a discount and that discount in this case is 10%.

So now, we are getting $9 million of their spend. They save $1 million; we gain $2 million. Now, some of you are going to say well, you gave up $1 million to get $2 million back, how does that work?

It goes back to what we bring to it. We brought all those technologies and innovations that create a lower spend on us – because now it's on us - but create higher margins because the baseline that we agreed with the customer was devoid of the technologies that we're now employing going forward. That's how we make money and for them, that's how they save money. They're saving $1 million through amortizing their costs over an annual basis. So, it truly is a win for them and a win for us.

Capital equipment installed base. We talked about the condition-based maintenance, Clay put this up before. This is a growing part of it. We're looking at the 55 contracts we have in place across five operators. This is growing quickly, and what is the scope of which this can grow at?

Some of you will remember we had this slide four years ago and to be honest, we just kind of liked bragging about the size of the marketplace. But fundamentally, these are all potential customers for a condition-based maintenance. So, we're looking at over 6,000 mud pumps; 3,000 top drives; 563 AC drawworks; 2,500 iron roughnecks; 750 control systems which can also be upgraded to NOVOS; 500 column-rackers; 6,220 BOPs; a huge installed base. 620,000 feet of riser; and 670 cranes, a lot of potential.

Now, I'll talk a little bit about how we're utilizing the TrackerVision™ technology that we have which fundamentally is the glasses on the hardhat. Most of you say “I was at OTC and saw guys walking around with that. What's so different for you guys?”

What’s different for us is that we've been using it for three years in the field. We utilize that technology to install and to troubleshoot our NOVOS systems on land rigs.

[Video plays]

So, what are you seeing here? Well, what you're seeing is what an engineer would be, sitting in the office looking at a field tech on an offshore rig.

He's got an issue here. He's going to focus in on the circuitry here. They're going to then take a snapshot of that circuitry. Working with technical support, we're able to pull up a diagram. We can then take that picture, go across the diagram, make sure it makes sense and do real-time optimization, not just with the knowledge base of a technician but the knowledge base of our enterprise -- huge.

[Video ends]

The key thing here is that black box. That black box allows us to utilize that helmet and that Tracker Vision on a global basis. We're the only company right now that has the ability to use that technology offshore. We can now work in rolling and pitching seas and sub-deck. None of the drilling contractors have seen that, been able to do it, and, in fact, they're in ongoing conversations with us they're saying how can we get access to this technology.

So, moving forward, we believe that there will be an increased NOC expenditure. Mid-water and harsh environment as we talked about, there'll be limited new capital rigs done offshore, but those are the two segments that we think will drive that expenditure.

Wind farm projects. FID approval. We're now seeing that coming forward and when you consider that's a $100 million to us, that's like a heavy duty jackup for us. So, it is material for our operations going forward.

Offshore rig demand increasing. You guys talk to the drilling contractors. They're all seeing a lot more requests for RFQs and as such, they're talking to us about rig reactivations. What you're going to see over the next few years is almost an avalanche of rig reactivations and that will help support our numbers going forward.

What I would like you to take away from this is that we size the business to the market. We flex. It's the secret sauce for who we are. Expanding scope into marine construction. We've been in that marketplace but we're now focused on that marketplace and that marketplace is moving forward and growing.

We continue to invest in our technologies going forward, we're commercializing them now. As Clay talks about, now is the time to be commercializing the new technologies. Now is not the time to start building them. If you're starting to build them now, you've missed it. We're now putting these things out in the field.

We are seeing an improving landscape. The bulk of that is on land, but there are some green shoots offshore. We are utilizing our global footprint. The Saudi Aramco joint venture, which is a very large one, could not have happened without us being in that marketplace and being supportive of that operator going forward. They knew that and wanted to pick us to be their joint venture partner.

And it's about understanding your customers. It's about what we said in the beginning. It's about making your customer successful. The offshore guys are under a lot of pressure. They're struggling to be able to have positive cash flow, let alone profitability. So we've got to bring technologies to them, not for the sake of the technology, but actually give them a benefit. That's what TCO does. It gives them a tangible benefit and that's why we're seeing a lot of uptake in that side.

Technologies to control. NOVOS, MMC. It's about moving people out of harm's way. It's about taking repetitive tasks and then make them automated. This is at the cusp of where the industry can go. I heard the comment about the mining's further ahead. Well, we're going to catch up pretty darn quick.

Increasing market share through TCO. We're sitting at the top table with Transocean, not once a week but every day, every hour. That embeds us in that relationship and will benefit us going forward.

Emerging offshore rig reactivations. It's a big number. We give you a range because it's truly "how long is a piece of rope?" It depends on the condition of the rig, what they're going to actually do. But it is a significant multi-billion-dollar opportunity for us and one which we expect will flow through in the next four years.

Thank you.