# TAILWINDS

NEWS ABOUT INNOVATION, MAINTENANCE, CONSTRUCTION AND MANUFACTURING



SMC personnel climbing an offshore wind turbine. (Courtesy: Specialist Marine Consultants)

#### **CONSTRUCTION**

## SMC contracted for Sofia wind farm

Specialist Marine Consultants (SMC) was recently awarded a contract from RWE's Sofia Offshore Wind Farm to deliver offshore resources and services for the duration of the project's offshore construction, commencing in 2023.

The turnkey package of works includes a range of services, such as an above-water offshore balance of plant works that includes statutory inspection and general maintenance of the TP, marine coordination resourcing, delivery of vessel inspections, project PPE management, specialist offshore construction resourcing, project consultancy support, and all associated project management.

"We are extremely proud to win the Sofia construction services contract," said Ian Coates, SMC managing director. "It is a major achievement for the company and testament to the entire SMC team who work onshore and offshore. SMC, following on from the success of the Triton Knoll project, where SMC undertook similar works on behalf of RWE, have taken great care to ensure we continued to develop our offering and to cement our position as a 'best in class' supplier of our respective services."

"Our recent achievements in this area, with solutions delivered to a range of clients globally, have allowed SMC to build and retain a strong team of specialists, focusing on local content and personnel development, something we know to have been a key priority for Sofia," he said.

Rob McLauchlin, Sofia's general site manager (offshore), said he is pleased to have a respected and experienced service provider join the Sofia team as it nears its next key phase of activity, offshore construction.

The 1,400-MW Sofia offshore wind farm is 195 kilometers from the U.K.'s coast on Dogger Bank in the central North Sea and is one of the largest single offshore wind farms in the world, as well as one of the farthest from shore.

It will comprise 100 14-MW turbines across a 593 square-kilometer site, which is roughly the same size as the Isle of Man.

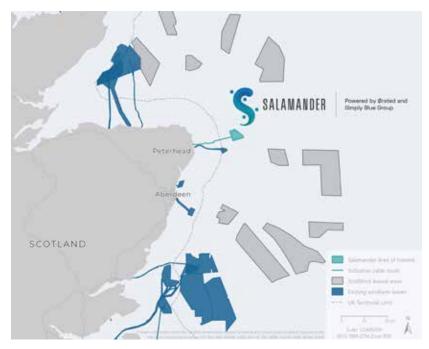
MORE INFO www.sofiawindfarm.com

#### **CONSTRUCTION**

# Salamander sets wind-farm consultations

The Salamander offshore wind joint venture is holding consultations allowing people to speak with the project team. The consultations were available virtually on the Salamander website until June 23. Salamander is a joint venture between Ørsted, Simply Blue Group, and Subsea7 that will support the local supply chain and create jobs.

Salamander, to be developed 35 kilometers off the coast of Peterhead, will generate enough green energy to power 100,000 Scottish homes. The joint venture aims to begin construction in 2026. "We're holding these consultation events so that local residents



Salamander, to be developed 35 kilometers off the coast of Peterhead, will generate enough green energy to power 100,000 Scottish homes. (Courtesy: Salamander Floating Wind)

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can learn more about this innovative development taking place on their doorsteps and be proud to be part of it," said Huw Bell, Salamander project director. "We also want to hear any ideas or concerns from the community so that we can take these into account at an early stage."

"Salamander presents an exciting opportunity for the Scottish energy sector and will serve a crucial role in the progression towards our decarbonization goals," he said.

The project is a stepping-stone to the large-scale floating offshore wind projects coming to Scotland in the near future. It has been designed to give Scottish companies the opportunity to roll out new technologies at a smaller scale, as they prepare to expand their operations.

This means local companies will be best placed to compete for contracts and create sustainable, longterm jobs. Salamander will also help deliver the Scottish government's target of 11 GW of offshore wind by 2030 and the U.K. government's target of 5 GW of operational floating offshore wind by the same date.

The virtual and in-person public exhibitions were designed to give the public an opportunity to complete a feedback form where comments and questions on the proposal, as well as any requests for further information, can be submitted directly to the project team.

MORE INFO www.salamanderfloating wind.com

#### CONSTRUCTION

## JDR to supply test cables for floating wind project

JDR Cable Systems, the global subsea cable and umbilical supplier, part of

the TFK Group, recently announced it has been awarded the contract to supply, test, and terminate the 66kV dynamic inter array cables (IAC) for independent renewable energy producer Qair's floating offshore wind Eolmed pre-commercial 30-MW project.

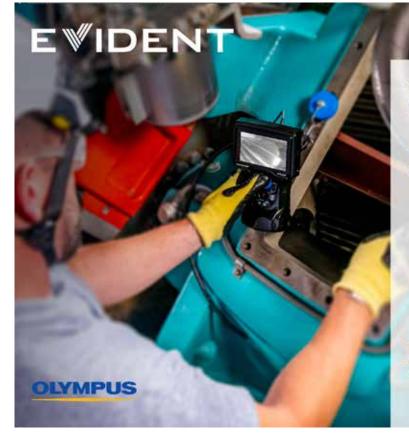
Located in the south of France, the Eolmed project will be connected to the French Electricity Transmission Network (RTE), providing about 100 million kWh per year of power – equivalent to the electrical consumption of 50,000 inhabitants.

JDR will design and manufacture the 66kV dynamic cables, with the cable cores being produced at TFK's Bydgoszcz plant in Poland.

The assets will be transported for final assembly and testing at the business's facility in Hartlepool, U.K.

The manufacture and delivery will be completed in the second half of 2024.

MORE INFO www.jdrcables.com



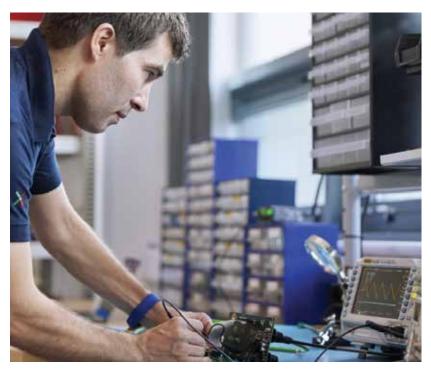
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Funding will support ONYX Insight expanding its predictive maintenance solutions from the drivetrain to the blades. (Courtesy: ONYX Insight)

#### **INNOVATION**

# ONYX Insight wins grant to boost bladesensing technologies

ONYX Insight recently secured a grant that will supercharge the adoption of blade-sensing technologies for the wind industry in a bid to reduce downtime for wind operators across their turbine fleets.

The Nottingham-based company has been awarded the funding by the U.K.'s Offshore Wind Growth Partnership (OWGP), part of the Offshore Renewable Energy Catapult.

The funding will support a project over the next 18 months that will see ONYX Insight expand its predictive maintenance solutions from the drivetrain into the blades. The project will build on the success of ONYX's wind-turbine drivetrain condition monitoring product, ecoCMS.

"The funding from OWGP provides us with a welcome grant to accelerate the development of advanced sensing for the blades," said Bruce Hall, ONYX Insight CEO. "It also acknowledges the work we have been doing to develop holistic approaches to CMS that provide ever more detailed and wide-ranging data insights for our customers."

As a provider of condition monitoring services (CMS) to the wind industry, ONYX Insight uses advanced sensing technology and data analytics to support wind-farm operators in identifying potential faults and planning maintenance. The company collects data directly from more than 14,000 turbines across 30 countries.

Catastrophic blade failure in onshore settings can cost upwards of 300,000 pounds in materials, equipment, labor, and unscheduled downtime, and can be much higher in an offshore setting. However, if this same fault is predicted and remedied when it is less severe, repairs can be significantly less.

It is anticipated that the adoption of blade-monitoring technologies will increase over the coming years, delivering significant financial and time savings for wind operators, with blade



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#### **FINNOVATION**

# Edinburgh researchers win grant for windturbine recycling

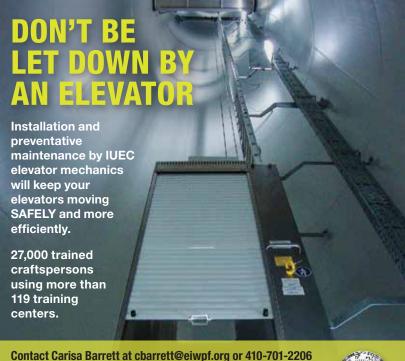
Engineering researchers have won a 125,000 pounds grant from renewables investor Greencoat UK Wind to develop their wind-turbine recycling process.

The researchers, from the University of Edinburgh, are developing a technique to turn old wind-turbine blades into powders that could be used to protect engineering and structural components, including new wind-turbine blades. Wind energy is a critical part of the renewable energy mix being harnessed in the U.K.'s drive to net-zero carbon, but the question of how to recycle wind-turbine blades at the end of their 20-25 year lifespan continues to pose an engineering and environmental challenge.

Wind-turbine blades are usually huge structures, made from a complex composite of materials bonded together by a strong adhesive known as epoxy, and reinforced with fibers, making them difficult and expensive to separate and recycle.

Professor Vasileios Koutsos and Dr. Dipa Roy, from the University of Edinburgh's School of Engineering, have devised a method to turn decommissioned blade materials into powders that could be used in surface coatings to protect engineering and structural components from corrosion and erosion by the elements.

Greencoat UK Wind, an investment



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We represent more than 450 elevator companies ready to serve your Elevator Lift needs trust specializing in renewable energy infrastructure, provided funding for a 12-month research project to develop the process.

The coating produced would help protect new wind-turbine blades from erosion caused by raindrops and other particulates. It could also be used in the built environment, for example, to prevent corrosion on the cables of suspension bridges.

The project is being supported by the University of Edinburgh's commercialization service, Edinburgh Innovations, who helped secure the funding.

MORE INFO edinburgh-innovations.ed.ac.uk

#### MAINTENANCE

# Rope Partner acquires Gladiators Cleaning

Rope Partner, the premier provider of rope access and blade services for wind turbines, has acquired Gladiators Cleaning, an industrial cleaning company.

The acquisition will allow Rope Partner to expand its offering to include cost-effective and low-environmental impact cleaning solutions for internal and external towers as well as nacelles and blades.

Rope Partner has been serving the wind-power industry since 2001 and has experience in at-height maintenance, inspection, and performance enhancing aftermarket services that require specialized access approaches. The company's extensive experience has helped clients across the globe with blade repair and improvements, tower mechanical and inspection scopes, reducing down time and maximizing output.

"Since partnering with Gladiators in 2019, our clients have capitalized on our offering of internal and external tower cleanings, including blades and nacelles with much success," said Eric Stanfield, CEO of Rope Partner. "Acquiring Gladiators furthers our TAILWINDS

ability to better amortize technician mobilizations and reduce standby by offering the ability to complete more work scopes in a single site visit.

We are very focused on being the 'Tip of the Spear,' bringing new products and services to our customers and this patented solution is yet another value add that we will offer our customers."

The acquisition of Gladiators, the

leader in wind-turbine power-washing, will help keep cleaning projects on schedule no matter how dirty the wind turbine.

This patented cleaning tool uses citrus-based cleaners and microbes to eliminate hydrocarbons, along with extensive wastewater removal measures.

MORE INFO www.ropepartner.com



cooling systems, automated lubrication devices, nacelle yaw motors, lift/hoist motors, and blade pitch motors.

When performed during a regular maintenance schedule, the surge, DC hipot, and megohm tests give users trending data on winding insulation condition so O&Ms can prioritize wind turbine servicing and schedule maintenance rather than risk unplanned downtime.



## MAINTENANCE B&K Vibro names new CEO

Brüel & Kjær Vibro (B&K Vibro), one of the leading worldwide independent suppliers of condition monitoring solutions for rotating machinery, recently named Ingo Anders as its new CEO.

Anders, who will be based at B&K Vibro's headquarters in Darmstadt, Germany, will lead the global organization in growth and operational management. With more than 25 years of experience in service operations, Anders most recently served as vice president of Operations in the vacuum technique business unit, at Atlas Copco. He previously spent 14 years as the Head of Service Operations at Schaeffler.

"I am looking forward to collaborating with our expert team to strengthen our customer relationships and expand B&K Vibro's reach into many industries, including oil and gas, renewables, pulp and paper, and steel," Anders said. "Our company aims to make doing business into the field of condition monitoring and machine protection as 'easy as a click." B&K Vibro delivers actionable insights that help its customers to fix faults faster. This is made possible by harnessing the company's expertise in remote monitoring and by implementing value-added monitoring solutions, such as DDAU III for wind turbines, and VCM-3 for the industrial field monitoring market. These offerings have expanded with the launch of BKV Beyond, a new platform that extends condition monitoring from edge to enterprise.

MORE INFO www.bkvibro.com

#### MAINTENANCE

# North Star completes Grampian Tyme crew

North Star, a U.K. vessel infrastructure

#### TAILWINDS

support operator, has crewed up the first of its offshore wind fleet with 42 experienced seafarers, 60 percent of which have moved across from its existing North Sea workforce, transitioning core skills and company culture into the new vessel and its operations.

This completes the crew for the firm's new hybrid-electric service operations vessel (SOV), the Grampian Tyne, alongside the catering specialist team from Aramark.

The new North Star ship is the first of four that will support ongoing operations and maintenance work at the Dogger Bank Wind Farm over the next decade for joint development partners Equinor, SSE Renewables and Vårgrønn. The new SOV was unveiled at its naming ceremony at Equinor's O&M base at the Port of Tyne on June 7.The 135-year-old business, which has been supporting the oil and gas sector for the past 40 years, has a workforce of about 1,300 crew and onshore personnel across its locations in Lowestoft. Newcastle, and Aberdeen. The business has a fleet of 42 emergency support vessels providing uninterrupted critical safety services to more than 50 U.K. Continental Shelf installations every day. It has never left a post unattended.

The company has also completed further investment in its Lowestoft workshop to enhance its quayside support with regular SOV and associated daughter craft maintenance. Katy Willis has joined the local team as tender manager to assist with further business growth, and Ben Gardner has been appointed as vessel manager to aid operations in Port of Tyne.

"Our successful expansion into the offshore wind market has opened up many exciting new opportunities for existing crew members and has also allowed us to attract new talent into the business," said Robert Catchpole, North Star COO. "Those transitioning across from our emergency response and rescue vessels have in some cases successfully upgraded their certification with our support to allow them to diversify into manning our offshore wind fleet of vessels in support of The Dogger Bank Wind Farm." "Being able to leverage our existing fleet's skill pool is a unique capability for North Star, and it gives us a real edge in terms of the safety culture and standards onboard," he said. "When we complement this knowledge and seamanship with external experience, we find ourselves very well positioned for successful operations moving forward."

MORE INFO www.northstarshipping.co.uk

# MANUFACTURING North Star, Alicat team for offshore wind daughter craft

North Star, specialist vessel operator for offshore infrastructure support, has awarded a new contract to Alicat Workboats Ltd, a leading Great Yarmouth-based shipbuilding firm, for the construction of two new offshore wind daughter craft. The hybrid-propulsion workboats 5 & 6, designed by Chartwell Marine, a U.K. pioneer of next-generation vessel design for the offshore wind sector, will be integrated into North Star's renewable fleet. They will complement the two new SPS 120 CSOVs under construction with Vard.

The latest additions to the fleet bolster the ongoing partnership between North Star and Chartwell, following the procurement of four daughter craft vessels between 2021 and 2024 for four contracted SOVs. Combining diesel and electric outboard propulsion and efficient hull design, the crafts respond to the demand in the offshore wind support market for low-emissions, high-performance vessels that can thrive in turbulent sea- and weather-states.

North Star delivered its inaugural service operations vessel (SOV) designed specifically for offshore wind operations and maintenance (O&M) support on Dogger Bank. The first of four SOVs bound for the development, the firm's distinct design, is powered by hybrid technology and provides wind-farm technicians with V1:C1 cruise liner standard comfort and accommodation while working in the field for extended periods.

Daughter crafts 5 & 6 will play a critical role in ensuring quick and safe operation offshore on the next series of vessels in North Star's renewables growth, transferring technicians from CSOV to turbine on a regular basis in a challenging offshore environment.

Alicat Workboats Ltd will build the two vessels based on the Chartwell Daughter Craft design specification, offering enhanced flexibility in the field for personnel development and logistics. The designs will integrate green technologies and futureproof for further technological advancements to come, facilitating the integration of low-emission fuels.

"We are thrilled to collaborate once again with North Star and Alicat, and excited to be able to apply our expertise on such a monumental offshore wind project — not just in the U.K., but globally," said Andy Page, Chartwell Marine director and naval architect. "The next-generation technologies and design philosophy of daughter craft 5 & 6 further solidify our shared vision for a green future in the maritime industry.

With the workboats playing a pivotal role in the further offshore sites serviced by North Star's Walk-2-Work fleet, providing a safe means of transfer for technicians, these vessels will prove essential in maintaining the momentum of the project's progression."

"Through our close collaborations with Chartwell and Alicat, we've witnessed their remarkable expertise and craftsmanship first-hand, so they were the natural choice for our next sequence of daughter crafts," said Andrew Duncan, North Star's renewables director.

"Their impressive track record has instilled in us the utmost confidence that they can reliably deliver on time in the fields of design and construction, helping us continue to provide essential services offshore."  $\prec$ 

MORE INFO www.chartwellmarine.com