

Unmanned Aircraft Systems (UAS)

FAA 333 exemption for operations both on land and offshore



Oceanengineering uses UAS to inspect difficult-to-access locations both onshore and offshore. This agile and optimized solution often eliminates the need for rope access teams or other means of access and effectively minimizes risk and increases uptime for asset operators.

Unmanned aircraft can be used to facilitate inspection of wind turbines, communication towers, power lines, infrastructure including

bridges, roadways, rail bridges, pipelines, and transfer lines, and other assets requiring routine inspection.

An added benefit of our aerial inspection services is that an operator will typically not have to shut in a flare boom/stack for remote aerial inspection. This in-service inspection capability reduces downtime and reduces costs.

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Our experience and commercially agnostic approach to UAS enables us to deliver a tailored and safe solution for close visual inspection of assets. We reduce customer cost, provide an independent view of risks associated with UAS, and understand the complexities of its application in the oil and gas market.

The service uses unmanned aircraft of various sizes, shapes, and propulsion capabilities to complete close visual inspection of assets including pipelines, flare tips, bridges, and wind turbines. Additional infrared functionality enables internal tank inspections and broader applications also support survey services (site surveys and coastal mapping) and emergency response.

Advantages:

- » Cost-effective, safe solution for completion of close visual inspection (CVI), survey services, and emergency response support
- » Delivery and management of data (images, videos, readings) to enable identification of additional required inspection efforts
- » Delivery of the most advanced technologies suited specifically for the application from the industry's most competent and compliant vendors
- » Complete project oversight while ensuring compliance
- » Global position in the market enables customers to benefit from our established relationships, cost efficiencies, standardization, and global regulatory compliance



	S800 RAV (N1964E)	X4 Titanium RAV (N1964J)
Airframe	DJI S800 Retractable Landing Gear	Aeronavics SkyJib-X4 Titanium Retractable Landing Gear Crash Cage
Camera Gimbal	Zenmuse Z-15 3 axis Nex-7 gimbal	3 axis PhotoHigher AV200 Indirect Drive
Electronics	3D Robotics Pixhawk Zenmuse Camera gimbal stabilization Futaba S Bus Receiver DJI Lightbridge HD video downlink DJI telemetry downlink DJI IOSD-On Screen overlay	3D Robotics Pixhawk Power Hungry Systems Distribution Boards Alex Mos Gimbal Stabilization Futaba S Bus Receiver DJI Lightbridge HD video downlink DJI telemetry downlink DJI IOSD-On Screen overlay
Radios	Futaba 8FG Super – Pilot Futaba 8FG Super – Camera Operator	Futaba 8FG Super – Pilot Futaba 8FG Super – Camera Operator
Motors/Prop/ESC	6x 4114Pro 400Kv Brushless Motors 6x Electronic Speed Controllers integrated into airframe 6x Carbon Fiber Prop 15x5	8x KDE 3520XF 400Kv Brushless Motors 8x KDE XF-UAS 55A+ Electronic Speed Controllers 8x RC Tiger Motor Carbon Fiber Prop 16x5

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