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## Summary

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### Product Description

<b>DOE Award/Contract Number</b>	AR0001188
<b>Recipient/Contractor (Organization)</b>	University of Maine
<b>STI Product Type</b>	Technical Report
<b>Report Type</b>	Final Technical Report
<b>Intellectual Property/Distribution Limitations</b>	Official Use Only; Copyrighted Materials; Program-Determined Official Use Only - OUO

### Product Type Info

<b>STI Product Title</b>	The NASA Floater: 15 MW Ultra-light Concrete Hull with Sea-water Ballast Tuned
<b>Publication/Issue Date</b>	09/29/2023

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### Content

<b>Report/Product Number</b>	DOE-1188
<b>Sponsoring DOE Program Office</b>	USDOE Advanced Research Projects Agency - Energy (ARPA-E)

<b>Description/Abstract</b>	In this project, UMaine developed the VolturnUS+ platform; a new 15MW+ ultra-light-weight, corrosion-resistant, concrete floating offshore wind turbine (FOWT) equipped with novel patent pending Heel Tank damping technology. UMaine developed this damping technology to reduce FOWT motions using existing onboard sea-water ballast, which has been integrated into the concrete cruciform hull resulting in reduced platform rigid body motions leading to a lighter hull, increased turbine performance, and a lower LCOE.
<b>Subject Categories</b>	17 WIND ENERGY
<b>Keywords</b>	Wind, renewable, offshore

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