

Stennis Outdoor Test Facility

A large jet engine is mounted on a test rig at the Stennis Outdoor Test Facility. The engine is white and black, with a large black fan. It is positioned on a white metal structure. The background shows a sunset with a bright sun low on the horizon, casting a warm glow over the scene. The sky is filled with soft, orange and yellow clouds. The ground is a flat, light-colored surface, possibly a runway or tarmac. In the distance, there are some trees and a few tall light poles.

Rolls-Royce North America

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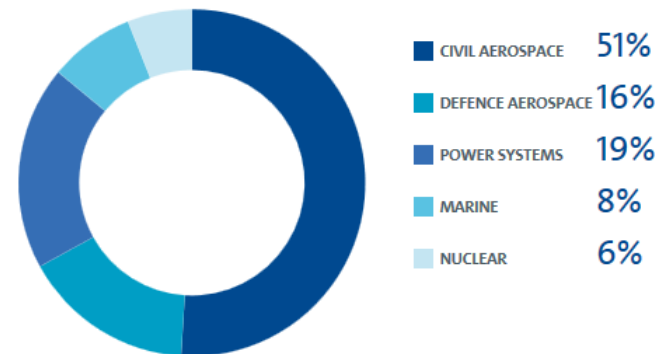


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About Rolls-Royce

- Rolls-Royce is a pre-eminent engineering company focused on world-class power and propulsion systems.
 - Civil Aerospace
 - Defense Aerospace
 - Power Systems
 - Marine
 - Nuclear
- Global footprint, operating in more than 50 countries with over 50,000 employees
- Customers in more than 150 countries.

Order Book \$103bn	Underlying Revenue \$17.8bn
R&D Investment \$1.7bn	Engineers 16,526



Rolls-Royce – Civil Aerospace

- With over 13,000 engines in service, Civil Aerospace makes up over 50% of Rolls-Royce business.
 - Airlines, Business Aviation and Helicopters
- By 2020, will have over 50% of the large aircraft in-service.
- Increasing international engine design and development.
 - Derby (RRPLC), Dahlewitz (RRD), Indianapolis (RRC)
- International engine testing capabilities.
 - Derby (RRPLC), Dahlewitz (RRD), Indianapolis (RRC), Montreal (RR-C)



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Rolls-Royce – Stennis Outdoor Test Facility

- Sole outdoor engine test facility for Rolls-Royce.
- Every new engine design must come through Stennis for key certification tests before entering into service.
- Recent advances in computational technology has moved mores testing activity indoors.
 - Controllable environment
 - Away from public and competitors
- Specific tests can only be completed outdoors:
 - Noise
 - Crosswind



Stennis Outdoor Test Facility

- State of the art test arenas with advanced data capture and analysis capabilities.
 - One arena is dedicated to **noise testing**: special ground surface coating, noise detection equipment and minimal acoustic disturbance
 - One area focused on **crosswind testing**: crosswind blower capable of delivering 3,000lbs of air per second at 45knots



- Both test stands capable of testing engines up to 140” fan diameter and 150,000lbs of thrust.
- Facility operates a 24/7 schedule with over 50 employees.



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Stennis – Suppliers

- Utilize a range of approved local suppliers to provide various services:
 - Construction
 - Consumables
 - Engine Test Stands & Tooling
 - Facility Management
 - Lab services (fuel / oil sampling)
 - Systems management (fire systems / water treatment)
 - IT
 - Logistics
 - Labor
 - Test Equipment & Services (Cal)
- 2016 Spend with Suppliers - \$2 million (excludes fuel / oil)
- All suppliers must be approved by Rolls-Royce through our Indirect Purchasing Department. (*indirect.poc@rolls-royce.com*)



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