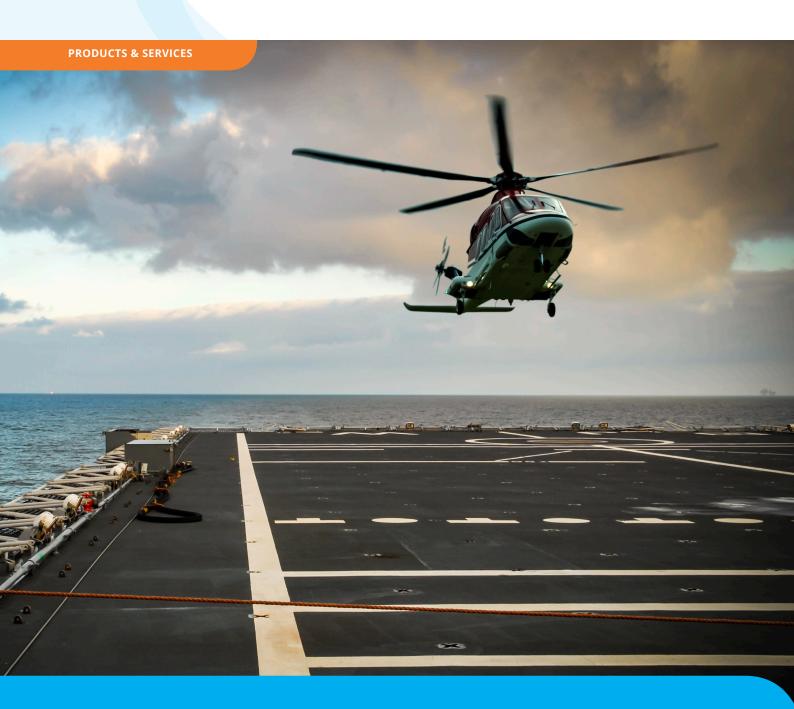


# Integration aviation facilities in offshore design



# NLR can offer support to optimize an offshore installation or vessel for helicopter operations.

Integration of helicopter facilities can have a significant influence on the offshore design. In addition, the airflow characteristics around the helideck have to meet requirements given in offshore aviation regulations and often wind force data are required to dimension a dynamic positioning system.

NLR has the knowledge and experience to support integration of helicopter facilities in an offshore installation or vessel design. We have the facilities to execute an aerodynamic investigation or execute testing of helideck surface material.





## WHAT YOU NEED

- Optimize the integration of helicopter facilities early in the design phase
- Ensure compliance to civil and military aviation regulations
- An aerodynamic investigation:
  - To ensure the offshore design meets aviation regulations with respect to air turbulence and ship's exhaust gas dispersion
  - To obtain downtime data based on aerodynamic criteria from CAP 437
  - To obtain wind loads on the superstructure for DP dimensioning
- Friction test of helideck surface material

# WHAT WE DELIVER

Based on more than 50 years of experience on helicopter-ship interface aspects, NLR can deliver support in a wide range of programmes ranging from design consultancy to full management of test campaigns.

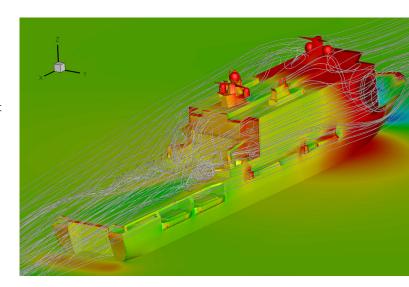
## **OUR CAPABILITIES**

- Expertise on requirements for helicopter facilities and equipment for design integration support
- NLR has the in-house developed regulations database SAFEguide to assist with verification and certification
- The Testhouse, our structural test facility, contains a test rig to execute friction tests with a helicopter tyre on samples of helideck surface material

## **OUR CAPABILITIES**

Aerodynamic investigation by wind tunnel test or CFD calculations to obtain:

- 1. Data of the airflow around the helideck as required by the offshore aviation regulations:
  - Air turbulence
  - Air temperature increase caused by exhaust gases
- 2. Data on wind forces and moments acting on the superstructure or water forces on the underwater structure of the offshore installation or vessel



# **PRODUCTS & FEATURES**

- Ensuring your vessel or platform complies with all the relevant aviation regulations
- Design support on integration of helicopter facilities
- Ensuring helicopter flight safety and minimizing helicopter downtime based on aerodynamic criteria as recommended by CAP 437
- Testing capability of helideck surface material requirements

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