



Dedicated to innovation in aerospace

# NLR Flight Test Operations

PRODUCTS & SERVICES



“And you thought size matters?  
Small facility, great affordability!”

What matters is the flight testing of your application. However, you do not want to spend large amounts of time and budget. NLR's flight test facility provides an affordable way forward. We operate two research aircraft from Rotterdam The Hague airport in the Netherlands: a Cessna Citation II business type aircraft and an electric Pipistrel SW128 light sport aircraft. Our experienced team of experts will ensure that your application will be successfully tested to your needs.

History: NLR's flight test facility represents more than a century of experience. Flight testing at NLR started in 1920, the beginning years of aviation. Since then, NLR has modified and flown many different aircraft types.

## PERFORMANCE

### CESSNA CITATION II RESEARCH AIRCRAFT:

- Max take-off weight 14,600 lbs
- Max altitude 43,000 ft
- Max speed 262 kts/Mach 0.7
- Max endurance 5 hrs



## WHAT YOU NEED

- Flight test platform to evaluate your application
- Short time between project initiation and test flights
- Flexible operations, including test location
- Support in flight test activities
- Low cost services, yet uncompromised in terms of safety and quality

## WHAT WE DELIVER:

- Accommodate your application in our aircraft
- Modify our aircraft if required (design, manufacturing, certification)
- Provide instruments to collect flight test data
- Plan, prepare and execute test flights in a safe and efficient way
- Perform test campaigns all over the world
- Support you with your own flight test activities
- Support you in all phases of research, development, test, evaluation and certification

## TOPICS

Flight test topics that we have accumulated over the years range from aerodynamics, flight mechanics, zero-gravity, atmosphere, airborne remote sensing and flight test methods, to system tests, air traffic management, avionics, alternative fuel, flight inspection, flight validation and on-board class-room instruction for educational purposes. These flights have brought us to different parts of the world, including cold weather areas and remote locations.

## AIRCRAFT

Our Citation has several hard points to accommodate external stores as well as a dedicated electrical and hydraulic system to support the experiment setup. Among others, a nose boom, antenna box, high-accuracy positioning system and Flight Inspection System can be readily installed on the aircraft. The cockpit is equipped with a digital integrated avionics system which offers the opportunity to test new display formats in flight.

Our Pipistrel is used for research related to green electric flight and sustainable aviation with zero emission.

Through our network, we also have access to other types of test aircraft.

## ORGANISATION

Our research aircraft operate in accordance with Part OPS. For the design, classification and approval of modifications, NLR holds an approval based on Part 21, while our maintenance organisation is Part 145 and Part M approved.

## PERSONNEL

Our experienced team of experts consists of qualified people like research pilots, flight test (instrumentation) engineers, R&D engineers, certifying staff, technicians and support personnel.

## CONTEXT

Our facility is subjected to regular inspections from aviation authorities as well as to frequent audits required by our internal quality system.

## QUALITY

Our flight test facility is linked to other NLR capabilities. We can provide you a broader platform for aviation research in general and other facilities in particular, like e.g. flight simulators, air traffic control simulators and wind tunnels.

## PRODUCTS & FEATURES:

- Flexible and affordable flight test services due to unique facility in terms of organisation and size
- Flight test facility that represents more than a century of experience in the business
- High quality flight testing of your application by a dedicated team of experts
- Wide range of supporting facilities, knowledge and personnel within NLR

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