

AT A GLANCE

## LANDING GEAR DESIGN & ANALYSIS



### CORE CAPABILITIES

- Requirements capture and definition
- Concept Design and architectural studies
- System and component design and integration
- System simulation and modelling
- Loads analysis
- Verification and validation
- Certification support
- Continuous product development
- In-service issues and incident support

## AT A GLANCE **LANDING GEAR DESIGN & ANALYSIS**



WheelTug® electric drive system

### **WORLD CLASS LANDING GEAR DESIGN AND INTEGRATION SERVICES**

**Stirling has over 30 years experience providing independent and impartial advice on landing gear design, analysis and modification.** We understand the challenges surrounding modern landing gear and have extensive knowledge of all the latest EASA, FAA and military requirements and standards, which are applied in conjunction with a range of proven in-house analysis and modelling tools.

Our specialist landing gear team works with aircraft manufacturers, system providers, modification companies and aircraft operators globally on a variety of fixed and rotary wing aircraft, from the Airbus A350 to the T625 Light Utility Helicopter.

### **AN END-TO-END ATA 32 SOLUTION**

Our capabilities encompass definition of the landing gear architecture, including **sizing, kinematic studies, shimmy analysis** and extend to the wider landing gear systems such as extension and retraction, steering, braking, door systems and monitoring system functionality; covering all aspects of ATA 32 subsystems.

Oleo pneumatic shock absorber modelling

Extension and retraction systems

Airframe and landing gear loads

Shimmy analysis

Wheels, tyres and brakes

Braking and steering control systems

Performance optimisation

Sizing and mass prediction

Tyre selection and modelling

Landing gear monitoring systems

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