



PHOTO: JOANNA MOSLEY/BOEING

# Ingenuity

**The pathway  
to possibilities**

**Ingenuity is an essential element in the discipline of engineering that brings dreams of flight to life.**

Behind every Boeing innovation are visionaries who see our customers through their toughest challenges. With an eye for originality, our sights are set on lean, agile and digital-driven solutions across the globe.

Ingenious approaches are apparent on every page of this edition of Innovation Quarterly. The cover story spotlights advances in pilot training. Immersive learning and high-tech instruction aids are augmenting the training experience and enhancing the safety of air travel.

Safety is strengthened further for military pilots through new software developed for the V-22 Osprey. The display provides “eyes” on the ground for reduced-visibility landings.

We look ahead to a horizon that includes 5G technology. Engineering leaders aim to further advance aviation safety by determining how 5G affects radio altimeters and exploring solutions for compatibility.

We invite you to read on, page by page, as we highlight ingenuity at every turn. **IQ**

A handwritten signature in blue ink, appearing to read 'Tony Hagen', with a stylized flourish at the end.

**Tony Hagen**  
Vice President and Chief Engineer,  
Boeing Global Services