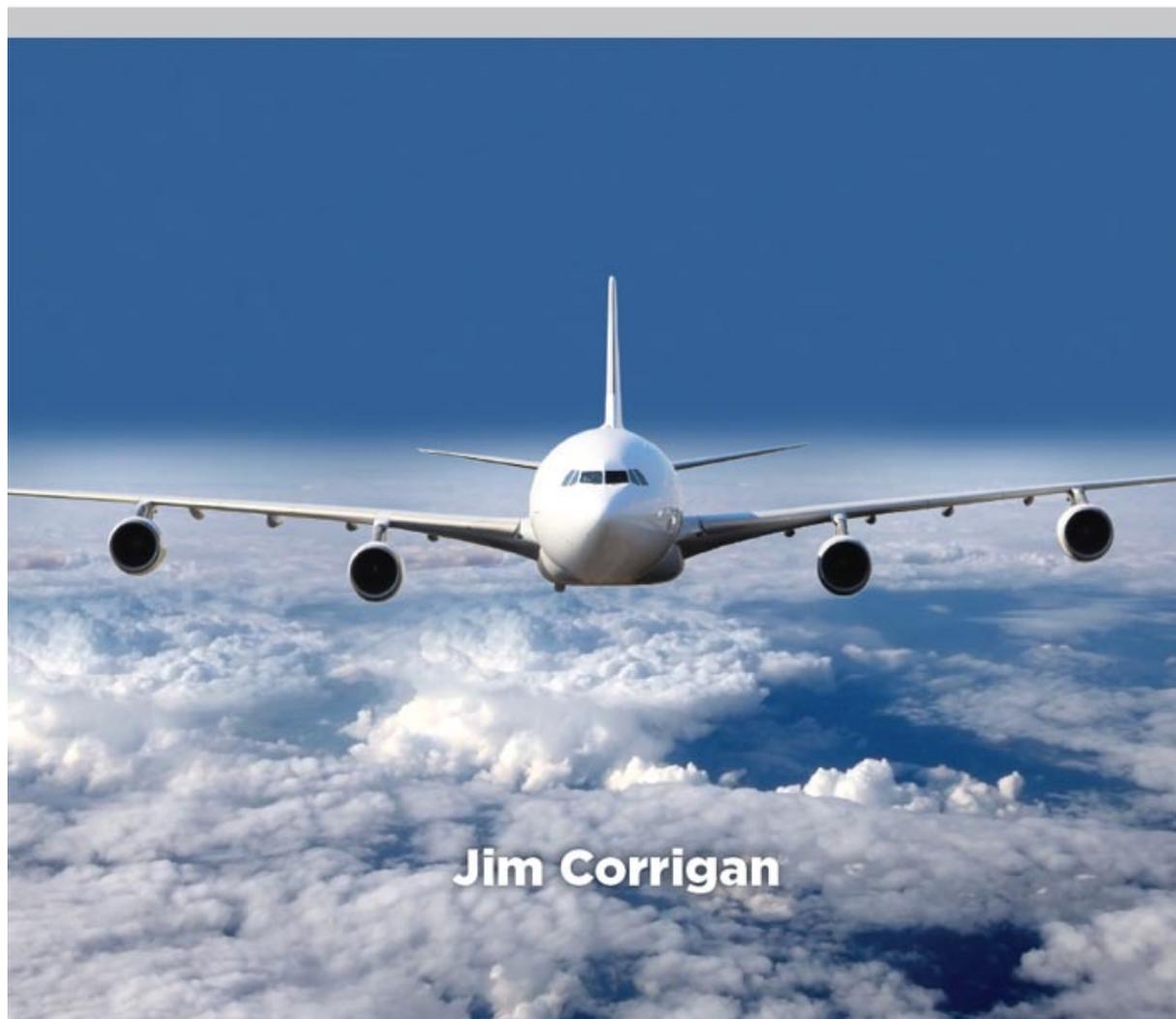


BIOMIMICRY

**AWESOME INNOVATIONS**  
**INSPIRED BY**  
**BIRDS**



**Jim Corrigan**

**Mitchell Lane**

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# Master of the Sky

**In July 2019**, a small plane crept down a runway in Filton, England. The jet had no passengers. It was an experiment.

Engineers from a company called Airbus watched it gain speed. They had named their test plane *AlbatrossOne*. With it, they hoped to uncover the secrets of nature's greatest glider.

The albatross is a majestic sea bird and master of the sky. Its unique wings can go more than 70 miles (113 kilometers) without flapping. The engineers admired the albatross's gliding ability. They gave their test plane similar wings.

*AlbatrossOne* left the runway and soared high into the air. Its wingtips flapped and fluttered. The wings looked strange, but they worked. Gusty winds posed no problem. *AlbatrossOne* used the gusts for extra lift. The little jet glided almost as gracefully as the bird it copied.

The Airbus engineers smiled and hugged. Their first experiment had succeeded. Many more tests would come, but they were off to a good start. Thanks to the albatross, tomorrow's planes might fly farther and use less fuel.

People at companies like Airbus hunt for new ideas. They never stop trying to improve their product or service. When someone finds a better way to do something, it's called **innovation**.

The race to innovate never ends. A hundred years ago, radio was the newest way to communicate. Today, we have the Internet and smartphones. Future innovators will find even better ways to stay connected.

## Nature's Innovations

We are not the only species to innovate. Life first appeared on Earth more than 3.5 billion years ago. Since then, countless species have found clever ways to survive. The gecko developed sticky feet to climb steep rocks and cling under leaves. Without this innovation, the gecko might have gone extinct.

Humans often look to nature for great ideas. Gecko feet have inspired climbing tools and sticky tape. In space, astronauts use “gecko gripper” pads to hold objects in place. Borrowing ideas from nature is called **biomimicry**. (*Bio* means “life” and *mimic* means “to copy.”) Today’s innovators use biomimicry to solve problems in our complex world.



Gecko feet have inspired climbing tools and sticky tape.

Birds have been flitting around this planet for more than 150 million years. Most scientists consider them living dinosaurs. They survived the asteroid impact that killed off the other dinosaurs.

During their long history, birds have made some remarkable innovations. The albatross teaches us about gliding, but many other species offer valuable lessons.



## FUN FACT

The albatross glides so well that scientists suspect it can **sleep in midair**. Naps must come in handy when you circle the globe **in just 46 days!**

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