

**DNA ON ISS**

NASA astronaut Nick Hague runs an analysis during the experiment exploring how space radiation damages DNA and how cells repair that damage in microgravity.

PHOTO: NASA



**“This is the kind of research that opens up many scientific gene-editing opportunities in the future,” said Copeland, who manages all the scientific payloads launched for use on the U.S.-operated part of the orbiting laboratory. “It offers researchers a pathway to additional experiments to drive our discovery that much further.”**

Breaks in DNA — the coded protein chain of molecules that detail every aspect of a cell's function and operation — can lead to mutations and in some cases even cancer. By carefully breaking a DNA molecule, scientists can observe how the repair happens.

Insight from these Genes in Space experiments may fuel future discoveries to prevent mutation and protect people from radiation, which is important for those on Earth but critical for astronauts who travel far beyond the protection of the planet's magnetic field. **IQ**

## Mirror image

**With the mountains on the plane matching those in the distance,** the Boeing 2021 ecoDemonstrator, an Alaska Airlines 737-9, soars above Washington state's San Juan Islands. This is the eighth airplane in the program since the program began in 2012. **IQ**

PHOTO: PAUL WEATHERMAN/BOEING



### SURPRISE SASQUATCH SIGHTING

Under the last "a" in Alaska on the Boeing 2021 ecoDemonstrator, sharp eyes can spot a stealthy nod to the Pacific Northwest.

KIM KWOCK/BOEING



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