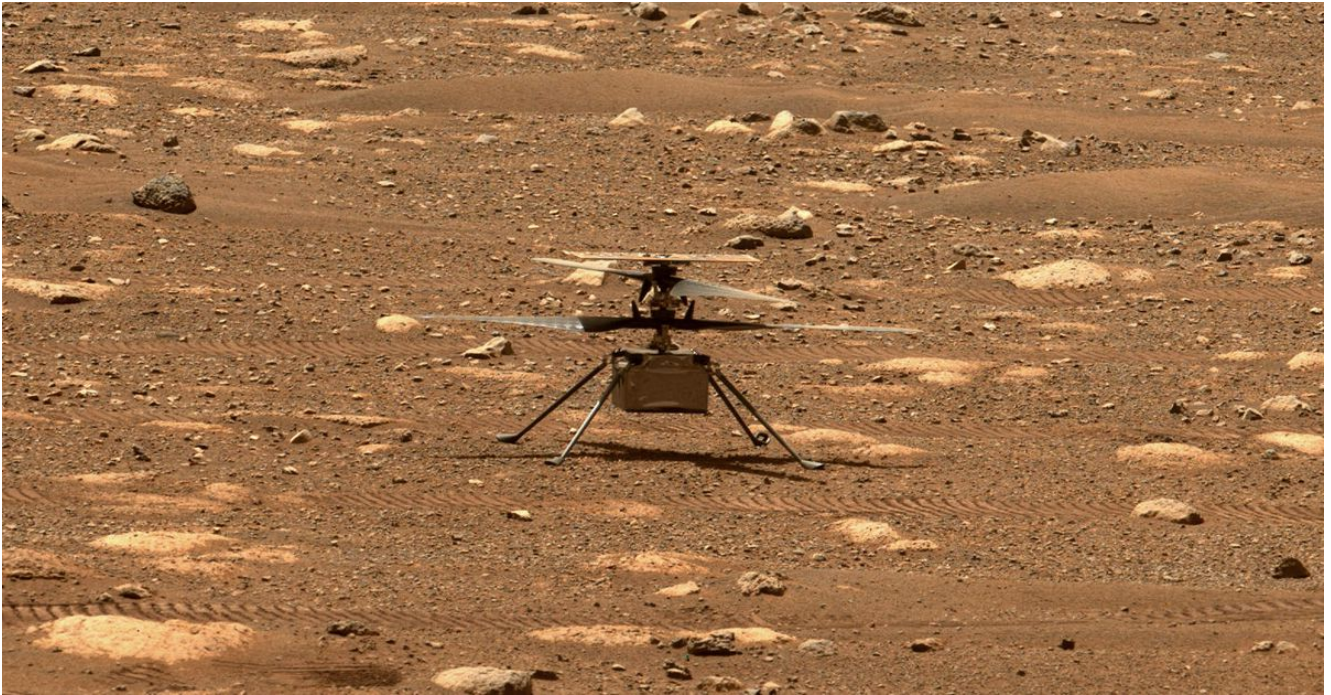


First flight test for NASA's Ingenuity helicopter pushed to Wednesday



NASA engineers have decided to delay the Ingenuity helicopter's debut flight on Mars to at least Wednesday, April 14th, after running into a minor computer glitch during a rotor spin test late Friday night, the agency said on Saturday. The tiny craft is healthy, but engineers need some more time to review telemetry data from the unexpected hiccup before proceeding.

Ingenuity, a mini four-pound helicopter that arrived on Mars February 18th attached to NASA's Perseverance rover, was initially slated to carry out its first flight test late Sunday night (or, mid-day Mars time). The first bits of data on whether the flight attempt was successful was expected to come early Monday morning, around 4AM ET.

But data from a high-speed rotor test carried out on Friday showed the test sequence "ended early due to a 'watchdog' timer expiration," NASA said. It happened as Ingenuity's

computer was trying to switch from pre-flight mode to flight mode.

Ingenuity's "watchdog timer" is just that – a software-based watchdog that oversees the helicopter's test sequences and alerts engineers if anything looks abnormal. "It helps the system stay safe by not proceeding if an issue is observed and worked as planned," NASA said in a blog post.

NASA emphasized the craft is healthy, and Ingenuity is still in good contact with engineers at the agency's Jet Propulsion Laboratory in California.

Ingenuity was deployed by Perseverance on the Martian surface on April 4th, kicking off a 31-day clock in which five flight tests are planned. For its first flight demonstration, the helicopter will ascend 10 feet above the surface and hover for about 30 seconds, aiming to achieve the first-ever powered flight on another world. Depending how the first test goes, subsequent tests will involve Ingenuity soaring to higher altitudes and buzzing around within its running track-shaped flight zone at Mars' Jezero Crater.

<https://www.theverge.com/2021/4/10/22377299/nasa-ingenuity-mars-helicopter-flight-delayed-wednesday>