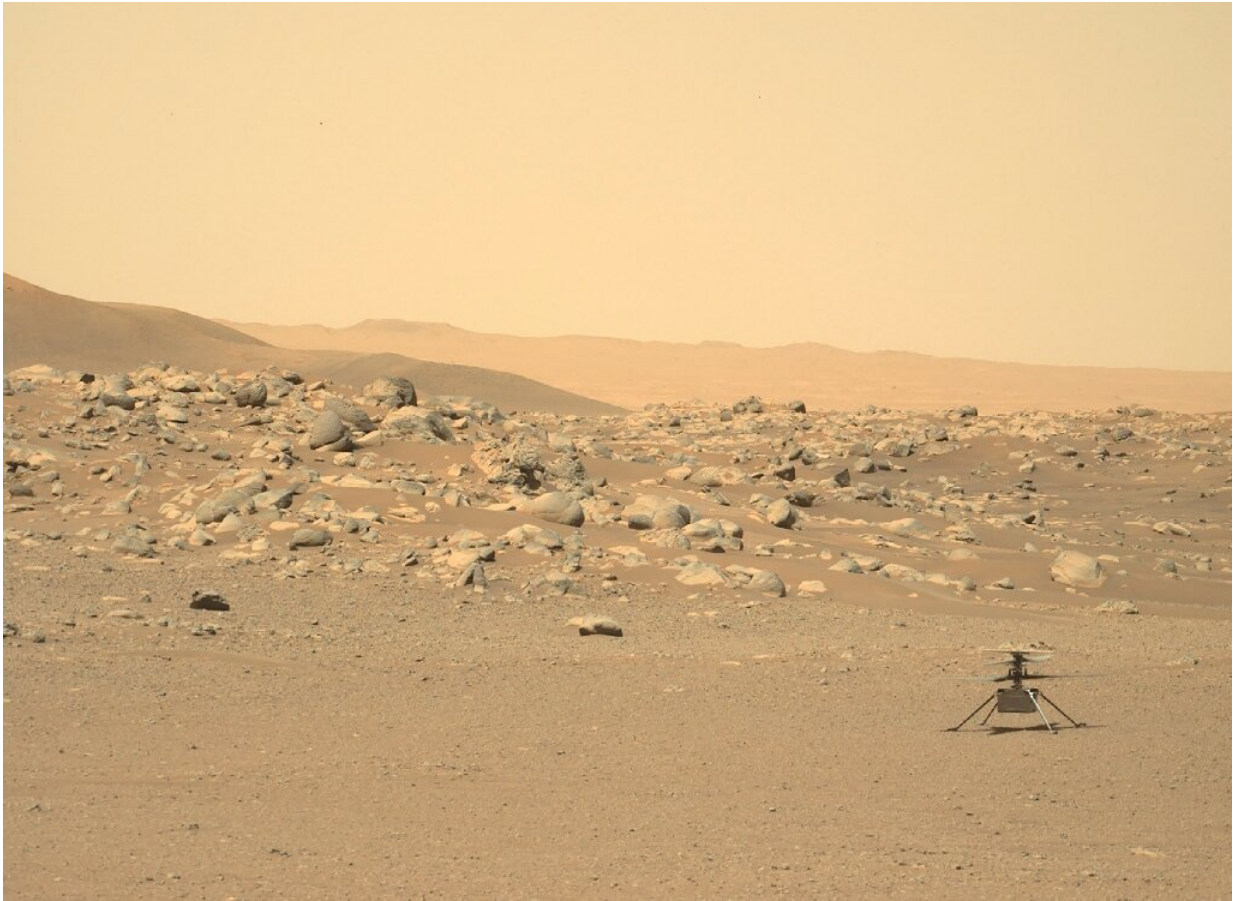


NASA's Mars helicopter 'phones home' after no contact for 63 days

June 30 2023



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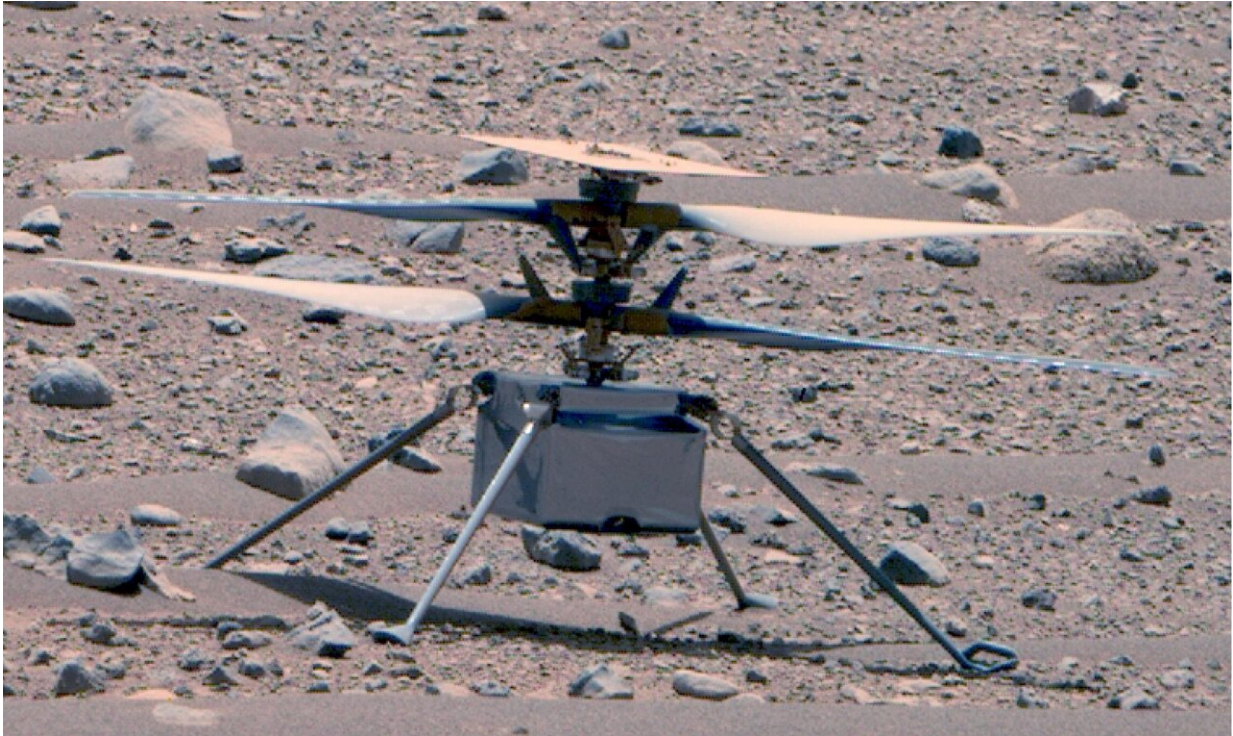
Long time, no speak: NASA has re-established contact with the intrepid Ingenuity Mars Helicopter after more than two months of radio silence, the space agency said Friday.

The mini rotorcraft, which hitched a ride to the Red Planet with the Perseverance rover in early 2021, has already survived well beyond its initial 30-day mission to prove the feasibility of its technology in five test flights.

Since then, it has been deployed dozens of times, acting as an aerial scout to assist its wheeled companion in searching for signs of ancient microbial life from billions of years ago, when Mars was much wetter and warmer than today.

Ingenuity's 52nd flight launched on April 26, but mission controllers at NASA's Jet Propulsion Laboratory (JPL) in California lost contact as it descended to the surface following its two minute, 1,191-foot (363-meter) hop.

The loss of communications was expected, because a hill stood between Ingenuity and Perseverance, which acts as a relay between the drone and Earth.



NASA's Ingenuity Mars Helicopter was captured by the Perseverance rover's Mastcam-Z on April 16, not long after the rotorcraft's 50th flight. The helicopter would soon fall silent for 63 days due hilly terrain that interrupted communications between the rover and aircraft. Credit: NASA/JPL-Caltech/ASU/MSSS

Nonetheless, "this has been the longest we've gone without hearing from Ingenuity so far in the mission," Joshua Anderson, Ingenuity team lead at JPL, told AFP.

"Ingenuity is designed to take care of itself when communication gaps like this occur, but we all still had a sense of relief finally hearing back."



NASA's Ingenuity Mars Helicopter is seen in shadow in an image captured by its navigation camera during the rotorcraft's 52nd flight on April 26. This image was finally received after Perseverance and Ingenuity were out of communication for 63 days. Credit: NASA/JPL-Caltech

Data so far indicates that the heli is in good shape. If further health checks also come back normal, Ingenuity will be all set for its next flight, westward toward a rocky outcrop the Perseverance team is interested in exploring.

It's not the first time Ingenuity has experienced downed communications. The heli was scouring an ancient river delta when it

went missing for around six days in April, "an agonizingly long time," chief engineer Travis Brown wrote in a blog post.

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