

Mars Ingenuity helicopter

April 29, 2022

In news- NASA'S Ingenuity helicopter flying for the 26th time on Mars has spotted the wreckage of gear that helped it land on Mars.

Key findings-

- After spending a year exploring the rocks of the crater it landed in, the Perseverance rover passed near its landing site on its way to a river delta that once flowed along the western rim of the crater.
- The rover's small robotic companion, the helicopter Ingenuity, continues to tag along.
- The **helicopter has spotted the cocoon** that safely got it to the surface of the Red Planet.
- During its 26th hop on the alien world, the quadcopter located and captured the wreckage of both the parachute and the cone-shaped back shell.
- While the backshell protected the rover in deep space and during its fiery descent towards the Martian surface acting as a heat shield, the parachute slowed it down before the crane dropped the Perseverance rover on the surface.
- Ingenuity **captured 10 coloured aerial images of the wreckage on the surface of Mars**, which is now a human-made space junk on another planet.

About the helicopter-

- **Ingenuity, nicknamed Ginny**, is a **small robotic helicopter operating on Mars as part of NASA's Mars 2020 mission along with the Perseverance rover**, which landed on February 18, 2021.
- Two months later, on April 19, Ingenuity successfully completed the first powered controlled extraterrestrial flight by an aircraft—taking off vertically, hovering,

and landing, for a flight duration of 39.1 seconds.

- **It was designed and built by NASA's Jet Propulsion Laboratory (JPL).**
- **It is operated by solar-charged batteries** that power dual counter-rotating rotors mounted one above the other.
- It carries a piece of fabric from the wing of the 1903 Wright Flyer, the Wright Brothers' airplane used in the first controlled powered heavier-than-air flight on Earth.
- Ingenuity's initial take-off and **landing area is named Wright Brothers Field as a tribute.**
- **Before Ingenuity, the first flight of any kind on a planet beyond Earth was an unpowered balloon flight on Venus by the Soviet Vega 1 spacecraft in 1985.**
- It has got a mission extension on Mars after completing nearly a year-long mission.