



**KAMARAJ IAS ACADEMY**  
Only IAS Academy by Grandson of "Perunthalsivam Kamarajar"

# Voyager 1: Reaching One Light-Day Distance

**Published On: 16-01-2026**

**News Context:** By November 2026, NASA's Voyager 1 is expected to become the first human-made object to reach a distance of one light-day from Earth—approximately 26 billion kilometers .

**The Milestone:** One light-day is the distance light travels in a single Earth day. At this range, a radio command sent from Earth takes 24 hours to reach the probe, and its response takes another 24 hours to return, making the "round-trip" communication time a full 48 hours.

- **Interstellar Mission:** Launched in 1977, Voyager 1 crossed the Heliopause (the boundary of our solar system) in 2012. It is currently traveling through the interstellar medium, studying cosmic rays and magnetic fields.
- **Wholistic Insight:** This mission demonstrates the limits of deep-space communication. As the probe's plutonium-powered generators (RTGs) continue to decay, NASA must selectively turn off instruments to keep the craft "alive" through the 2030s.

**Kamaraj IAS Academy**

Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040

Phone: **044 4353 9988 / 98403 94477** / Whatsapp : **09710729833**