



The Amateur in You, Part 2

What have you been pondering?



Unmanned crafts using amateur radio

Did you know that amateur radio is the type of wireless communication that's used on many kinds of unmanned hobby craft? From airplanes to balloons, ham radio transmitters, and even transceivers, are often the radio of choice for a variety of hobbyists. And we specify "hobby" because amateur radio is not to be used professionally, as you know.

RC airplanes and helicopters

One of the most widespread uses of amateur radio by unmanned aircraft in the 20th Century has been in RC (remote-controlled) aircraft, including helicopters. Many of these unmanned aircraft, regardless how they're propelled, can easily be classified as "drones" by today's standards.

Drones

The ever-expanding field of unmanned multiple-rotor aircraft, or drones, have been used in numerous ways, and many use amateur radio as a means for communicating control, telemetry, video, and data. Recently, some of their pilots have come under fire, however, and even fined, due to having steered them dangerously close to firefighting operations and commercial aircraft, requiring operators to be extra vigilant.

Boats

The very first remote-control use of amateur radio was in operating a watercraft, by [Nikola Tesla himself](#), in 1898. Since then, numerous recreational and sport activities have incorporated amateur radio in controlling seabound and even underwater vessels.

Balloons

Lighter-than-air unmanned craft, such as weather balloons, have also seen amateur radio use early on. A fun activity that has

seen some press in recent years is unmanned hobby ballooning, especially [those involving amateur radio](#). A high-altitude balloon might capture video during its trip, then broadcast a beacon on an amateur radio frequency, resulting in a *fox hunt* of sorts, to locate the descended craft.

Satellites

Amateur radio satellites are little more than orbiting repeaters, yet they can accept telcomands to change configurations. Even the Technician-class radio amateur has the ability to enable (turn on) a satellite's repeating capability by sending it a tone.

Space craft, rovers

The [ISS](#) (International Space Station) is a manned craft; however, some unmanned space craft were created to retrieve and transmit important data, like the [Hubble space telescope](#). Most of us remember the remotely controlled Martian vehicles [Opportunity](#), [Spirit](#), and [Curiosity](#), as they roved across the red planet surface. And the forever-traveling [Voyager spacecrafts](#) have sent us an amazing amount of data regarding our solar system.

No, none of the above spacecraft use amateur radio frequencies, because they're largely professional in nature. But, they're examples of yet another use for unmanned, extra-terrestrial radio control.

Others

Earlier, we specified "hobby" use, but what about emergency use, like Search and Rescue, danger zone penetration, and surveillance? Yes, some of those are possible uses for amateur radio in unmanned craft as well.

Do you know of other kinds of unmanned hobby craft that makes use of amateur radio? Please drop us a line and share!