**WSPR to the Wind With a Pi Pico High Altitude Balloon**

Richard Baguley in Hackaday:

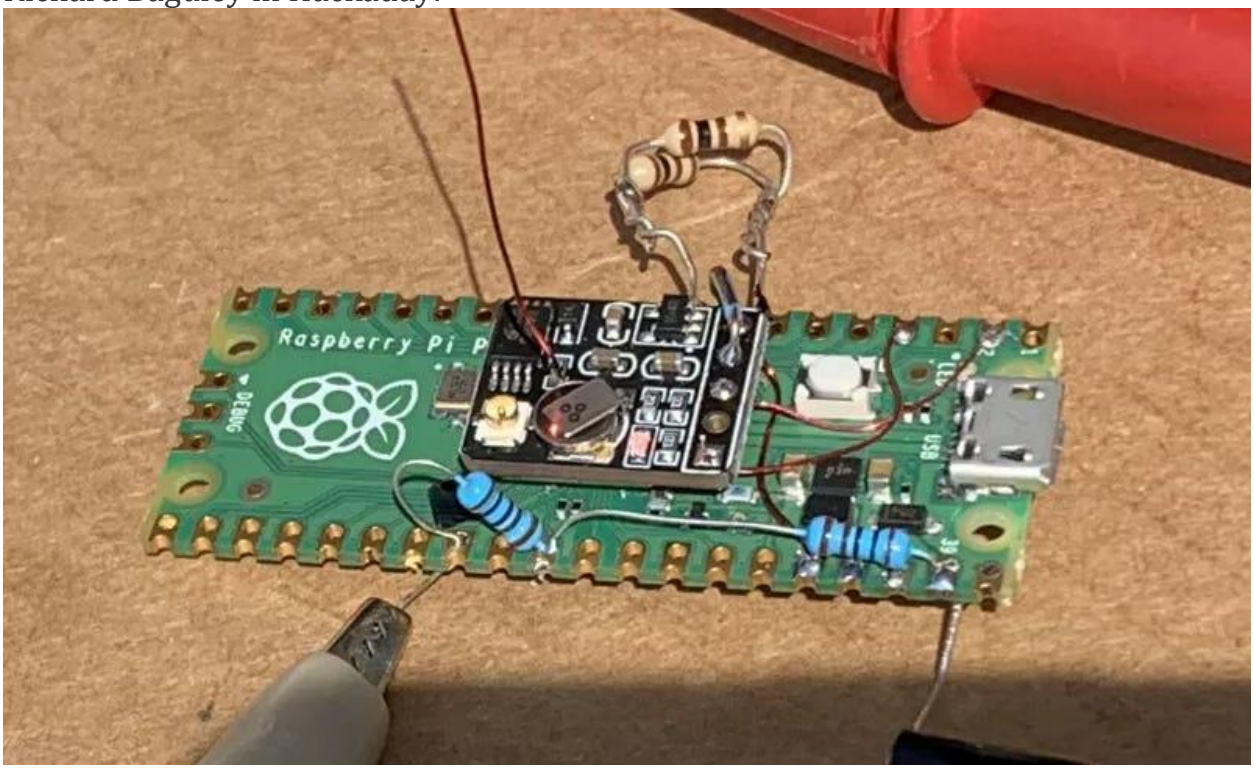


Image courtesy of Hackaday

> They say that if you love something, you should set it free. That doesn't mean that you should spend any more on it than you have to though, which is why [EngineerGuy314] put together this Raspberry Pi Pico high-altitude balloon tracker that should only set you back about $12 to build.
>
> This simplified package turns a Pico into a tracking beacon — connect a cheap GPS module and solar panel, and the system will transmit the GPS location, system temperature, and other telemetry on the 20-meter band using the Weak Signal Propagation Reporter (WSPR) protocol. Do it right, and you can track your balloon as it goes around the world.
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> The project is based in part on the work of [Roman Piksayin] in his Pico-WSPR-TX package (which we covered before), which uses the Pico's outputs to create the transmitted signal directly without needing an external radio.
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> [EngineerGuy314] took this a step further by slowing down the Pico and doing some clever stuff to make it run a bit more reliably directly from the solar panel.
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> If *this* project doesn't get your imagination stirring about what's possible in Amateur Radio with incredibly powerful, but cheap computing power (again, notice… ***no… radio…)*** then please just unsubscribe now from Zero Retries.
>
> This project epitomizes my recently updated email tagline:
>
> ***Radios are Computers - With Antennas***