**Bautek** is a [German](https://en.wikipedia.org/wiki/Germany) aircraft manufacturer based in [Kenn](https://en.wikipedia.org/wiki/Kenn%2C_Germany). The company specializes in [hang gliders](https://en.wikipedia.org/wiki/Hang_glider) and [ultralight trikes](https://en.wikipedia.org/wiki/Ultralight_trike).

The **Hall Cherokee II** is an [American](https://en.wikipedia.org/wiki/United_States) [high-wing](https://en.wikipedia.org/wiki/High-wing), single seat [glider](https://en.wikipedia.org/wiki/Glider_%28sailplane%29) that was designed by [Stan Hall](https://en.wikipedia.org/w/index.php?title=Stan_Hall&action=edit&redlink=1) and introduced in 1956 as plans for [amateur construction](https://en.wikipedia.org/wiki/Homebuilt_aircraft).[[1]](https://en.wikipedia.org/wiki/Hall_Cherokee_II#cite_note-SD-1)[[2]](https://en.wikipedia.org/wiki/Hall_Cherokee_II#cite_note-SoaringNov83-2)

Due to its low cost and ease of construction, the Cherokee II is one of the most produced home-built gliders.[[](https://en.wikipedia.org/wiki/Hall_Cherokee_II#cite_note-SoaringNov83-2)

The Cherokee was designed by Hall to provide homebuilders with an easy-to-construct and inexpensive aircraft that would give performance at least equal to the [Schweizer SGS 1-26](https://en.wikipedia.org/wiki/Schweizer_SGS_1-26), which had flown two years earlier.[[1]](https://en.wikipedia.org/wiki/Hall_Cherokee_II#cite_note-SD-1)[[2]](https://en.wikipedia.org/wiki/Hall_Cherokee_II#cite_note-SoaringNov83-2)

The Cherokee structure is built from wood and covered in doped [aircraft fabric covering](https://en.wikipedia.org/wiki/Aircraft_fabric_covering). The [fuselage](https://en.wikipedia.org/wiki/Fuselage) features truss construction, with longerons and gussets and a fixed monowheel landing gear. The wing has two spars, with [geodetic](https://en.wikipedia.org/wiki/Geodesic_airframe) braces handling the torsion loads and is built with a fixed center section and removable outer wing panels. The wings have [spoilers](https://en.wikipedia.org/wiki/Spoiler_%28aeronautics%29) on the top surfaces and use a Gö 549 [airfoil](https://en.wikipedia.org/wiki/Airfoil)

with a 40 ft (12.2 m) wingspan. About 100 built in the USA, Canada and Australia.[[](https://en.wikipedia.org/wiki/Hall_Cherokee_II#cite_note-SoaringNov83-2)

The cane for the baskets comes from South East AsiaThe fabric — it takes about 2000sq m for one canopy, that’s the size of eight tennis courts — is from South Africa and it takes about five weeks to sew as many as 800 panels together on a Singer machine, to a printed pattern.

Lesley Olsen, 58 from Gosford, has had that job for 13 years.

The fuel tanks are made in Melbourne, but to Phil’s design, while welder Joel Anderson makes the gas burners. It takes around three months to make each balloon.

Phil Kavanagh has been making hot air balloons for 45 years after falling into the industry by chance.

In 1968, when manned balloons were literally getting off the ground, the former boat builder happened to be working next to the base of Sydney University Balloon Club.

As he had a car with a tow bar, he was recruited by the club to join them in flying their risky early creations.

After a successful flight, it deflates down to the ground.Phil Kavanagh’s first balloon heads for the sky around 1969.

It wasn’t so much the flying as the manufacture which caught Phil’s imagination. Back then, he used to write to the US to get the instructions on how to make his own.

By 1979 he was doing it full time, with the help of wife Wendy, and now he has eight staff.

He even knows how many balloons he’s made — 497.