

# Gibson Mädchen

by Frits Sauvé



Most kites nowadays have heard of the Gibson Girl kite. The name originates from the work of the American illustrator Charles Dana Gibson, who worked for different magazines from 1890 to around 1920. Gibson gave the female figures in his illustrations a strong S-curve torso. The Gibson Girl is a nickname given to the British-American emergency transmitter, used in airplanes in WW2, because of the strong S-curved midpart of the outer box of the transmitter. The S-curve in the box makes it easier to hold it between the knees while broadcasting. The emergency transmitter was put in every fighting plane and was later used in boats. However, kites do not use the name for the transmitter but for the kite that came with the radio, together with other accessories for broadcasting.

The kite was made to take up an antenna for broadcasting an emergency signal. The antenna, which also served as the flying line, was rolled out by a line winder that was ingeniously built into the radio. The Germans developed an emergency transmitter in 1930 and followed with an improved version (called the NS2) in 1941. When the British shot down an airplane in 1941 above the English Channel, the plane's equipment was studied and handed over to the Americans. Soon, the emergency transmitter set was born.

## A German Gibson Girl?

Much of the German war material was

destroyed after 1945, including most of the NS2 transmitters. Nowadays, only a few of them are in the possession of amateur radio collectors. The transmitter also had a kite to lift the antenna, and was used at windspeeds of 6 m/sec and up. For lower windspeeds, or no wind, an antenna balloon was used. The German kite is even harder to find.

## Luck and Attention

In 2005 an old kite was offered through a well-known internet auction site. The kite appeared to be very similar to the kite that came with the German NS2. A quick investigation and thorough questioning brought me to the conclusion it was indeed a German Gibson Girl kite. A group of historic kite enthusiasts pooled resources to ensure the kite would be preserved for posterity, yet still be accessible to interested members of the kiting community and the public. The team approach paid off, and the kite was secured by the group. In 2007 the "miracle" was repeated when another German WW2 kite was offered and the same team was successful again.

## Simple and Ingenious

The kite is a box kite with two cells and a pair of wings. The kite has no bridle; the flying line/antenna is directly connected to a fixed point on the front corner of the upper box. The British-American version has no wings and two fixing points for different wind speeds.

The kite has a height of 99 cm. Both cells have a height of 33 cm and each side has a width of 35.5 cm. The spacing between the cells is 33 cm. Both triangular wings are the same height as the kite (99 cm) and on the lower part of the top cell the width of the wings is 24 cm. On one side of the top cell, as well as on the bag that came with the kite, sketches and an explanatory text show how the kite is assembled. The original cloth was impregnated to prevent the kite becoming too heavy in rain or if briefly dropped into the water.

All wood in the frame is beech. In each corner of each cell, a 7 mm upright is mounted in a closed sleeve. These uprights have the same length as the cells' height, so there is no upright running from cell to cell, although the sleeves run over the total height and are visible as a connection in between the cells. On the left and right side, the wings are attached to these sleeves.

All metal parts are aluminum, soldered if needed. On each of the 8 upright sticks, a metal tube can slide over them. The tube is a round-bended, small metal plate that ends up in a two-layer fixing point that is connected with

*Central block in the upper cell shows the 4 spreaders and hinges. The horizontal wing stick is also visible.*



**NS2 transmitter with built-in winder**



Lower connecting block showing the small spring and tension screw.

a second tube. This second tube has a flattened end. Both parts are connected with a rivet in such a way they can turn like a hinge. The total hinge (rounded metal plate, rivet and flattened tube) can slide over the stick and comes out of the sleeve through a buttonhole. A nail with rounded top, driven through the stick just above the buttonhole, prevents the hinge from sliding too much to the outer edge of the cell. The hinge can easily slide into the cell, which needs to be possible when one of the 7 mm sticks is broken. The stick can be taken out through a second buttonhole that is made in each of the 8 sleeve edges a few millimetres before the sleeve ends on each of the cell edges. The inner diameter of the free tube end is 7,5 mm.

In each cell, from each of the hinges, four 7 mm sticks are connected with a central connecting block. A total of 8 sticks spreads out two boxes. The kite has two of these blocks, which are bent and soldered metal sheets. Each block has a rectangular hole in the center to slide through the main center stick. On each of the four corners of the central blocks, a hinged tube (similar to the ones in the cells' corners) is fixed with rivets. These tubes catch the 8 sticks that run from each corner. The central stick, also made of beechwood and measuring 12 x 7,5 mm, can slide through the two rectangular holes. On one side a nail fixes the stick in the top cell, on the other side a simple spring prevents the stick from sliding back after having passed this spring. On the spring side, the lower part, an extra tension screw prevents the kite from collapsing when the spring breaks or gets loose and can give the central stick extra tension if the cloth gets too loose. Finally, a 7 mm round stick stretches both wings. The stick fits into two simple pocket holes and runs through a metal connector made of wire, fixed on the central vertical stick. The kite is now ready to fly. While this is a simple and ingenious construc-



Assembly instructions.

tion, it's not so simple to rebuild, because the metal parts need to be made by a specialist.

### Who Built It?

The complete radioset was delivered by Friese und Höpfner Gräbetbau from Potsdam Germany, who built the emergency transmitter NS2. Friese und Höpfner had subcontractors for parts of the set, so the question remains: "Who built the kite?" One cannot say for sure, but when looking at the details in the kite there is a great similarity with the Roloplan kites made by the toy company Steiff. I have in my collection a number of original Steiff kites, Roloplan and Adler, and used this material to compare the choice of material and the techniques used to built the NS2 kite. The similarity is remarkable. Does this mean Steiff has built these kites? We cannot say for 100% sure and Steiff is not really answering the question. They say that no proof of this can be found in their archives. It is acceptable to assume Steiff has built this kite and emotional reasons make it difficult to admit this. Having built military equipment in WW2 in Germany is something not all Germans are proud of. I personally think it is important to prefer history over emotion. It takes time, generations even, to get there. This needs further investigation.

### How Does It Fly?

Flying an old kite of which only two are known today is a risky thing to do. Isn't the wood too dry to fly? Does the old cloth tear under wind pressure? And, more importantly, does it make sense to fly an old kite? What do I gain, besides a lot of extra heartbeats?

Please, never copy my behavior!

Old kites are there to be studied, looked at, enjoyed, learned from, copied and preserved for the future, but not to be flown for fun. But, weak and curious as I am, I could not resist the little voice inside of me and I decided to fly it.

The kite is a little slanted because of being stored, forgotten, in a ceiling for 50 years. The original flying line was a 1 mm twisted steel antenna wire, 65 meters long. An original antenna line winder for the NS2 was in my collection, on loan from a good kite friend, but I decided not to use this. Finally, the kite was flown on a 1 mm hemp line with a careful kite flyer on one end and a precious piece of history up in the air on the other end. As expected, it didn't fly as well as the Germans had designed it to. I made some very quick pictures then took the kite down fast to store it safely.

I do realize an article is never completed and a study neverending. I apologize for any errors or misconceptions. If you have relevant information or if you want to discuss this publication, you can contact me at any time in the Netherlands at [sauve.lief@chello.nl](mailto:sauve.lief@chello.nl).

