



Connecticut Flitzer Werke

*Frohe
Weihnachten!
Merry
Flitzmas!*

Work continues apace on the Morrisov machine, with first flight now projected "within a year."

"That's the revised schedule I tell everyone on every day going forward," says Baron Ivan Morrisov of the project to resurrect the aircraft flown by his forebear, the illustrious Baron Ivan Morrisov.

"That way the first flight will be a year earlier than projected and we can all celebrate the early achievement of a major milestone."

The next few months will see the painting of the Staaken Flitzer Z-21 in its distinctive Morrisov colors—the fuselage in Bavarian blue and white diamonds, and the wings in the dark four-color night bomber lozenge camouflage used by Staaken in 1926.



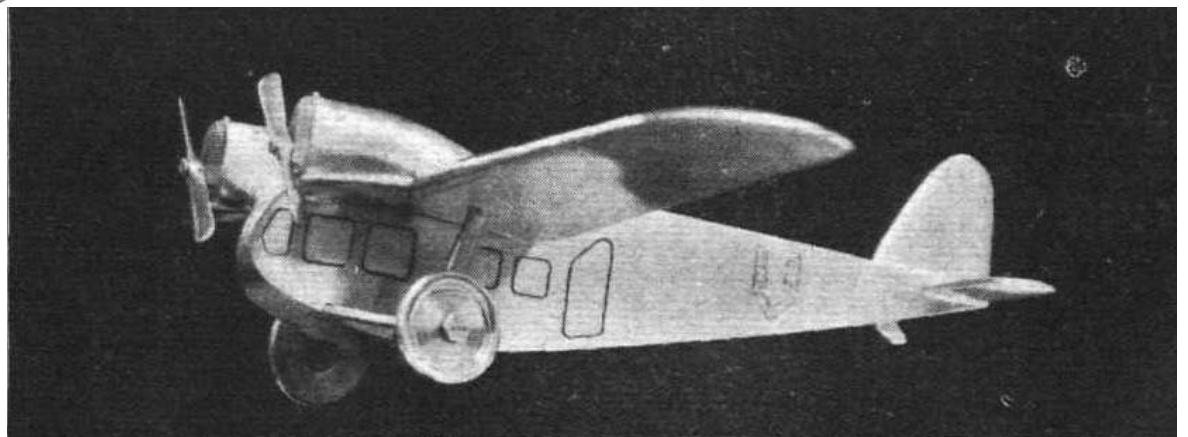
Prost! The Baron and Baroness propping up Christmas tradition.



First Aero Weekly in the World

A new Zeppelin-Staaken Monoplane: Our photograph, the first to be published in this country, shows the wind channel model of this new machine which is now being built at the Zeppelin works. This machine, it will be seen, will have two engines only, placed comparatively close together, so that the turning moment when one engine stops should be quite small.

Flitzer: the Link with the Past



Family resemblance: just look at the bullet nose! *Flight* (17 March, 1921) disclosed there was other activity in the Staaken workshops.

This Should Have Been the Cover Story



A length of Ceconite fabric is sized and cut to cover the whole side of the fuselage up to the decking in one piece.

Why, the Baroness asked, do you have to cover up all that beautiful woodwork?

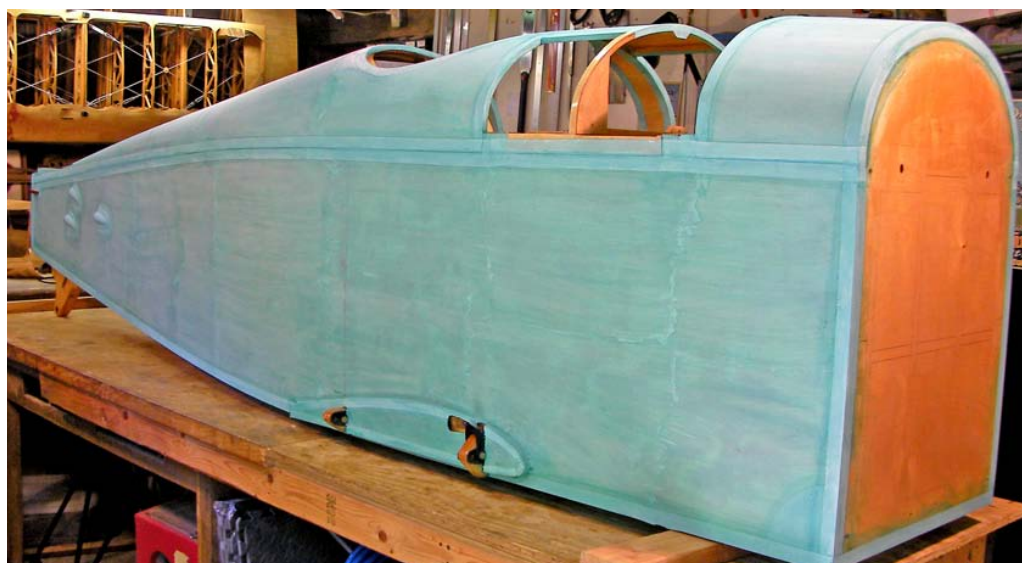
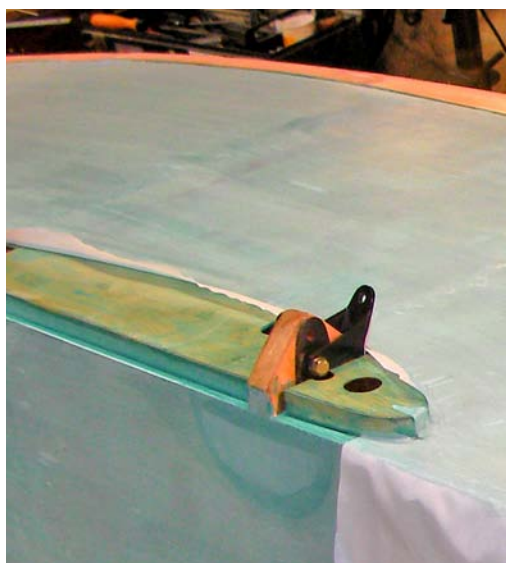
Two and a half years of hard labor by the skilled craftsmen at the *Flitzer Werke* was consigned to oblivion as the Baron ordered the Morrisov machine covered up.

Not a blanket of secrecy, of course, but the necessary next step to resurrecting the Morrisov machine and launching it into the skies of New England where the previous Baron Ivan Morrisov once flew early production flying boats for Igor Sikorsky.

First the bottom of the plywood fuselage, then the sides, and finally the curved decking were covered with fabric, and every opening and access point reinforced with pinked tape. Special care was taken on the join between the decking and the fuselage sides to ensure the tape ran true, in a continuous sweeping curve from cockpit to tail that accentuated the graceful arc of the top longeron.



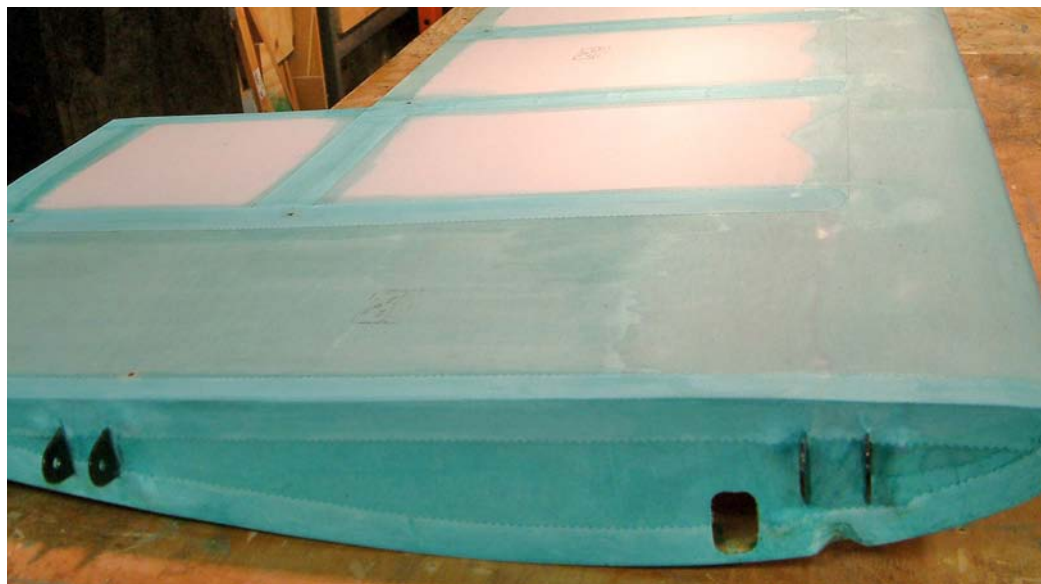
Sides covered, Ceconite is now fitted and glued to the upper decking, with great care being taken with the cosmetics around the cockpit opening as these will show later.



The Ceconite was teased around the wing roots and they, too, were covered. Right—the fabric and finishing tapes show off the graceful lines of the Flitzer fuselage.



The lower wings were covered in one piece of Ceconite, from trailing edge, over the leading edge, and back.



The fabric is glued to plywood surfaces to prevent moisture build up. Wing rib stitching (see below) is completed.

The Coverup Continues...

The Baron made the decision to use Stewart Systems' covering method after attending one of their courses. The compelling advantages are the use of water-based or water-borne glues and paints, making the whole process environmentally friendly with water cleanup, and the ease of working the fabric and tapes with the Stewart Systems adhesive. As a considerable plus, the system has been FAA approved with Supplemental Type Certificates for use on numerous standard certified aircraft.

The fuselage bottom and sides were covered with uncertified 1.7 ounce Dacron, and the top decking with the stronger 2.7 ounce Ceconite 102.

The wings, ailerons and tail were covered with certified 2.7 ounce Ceconite 102.

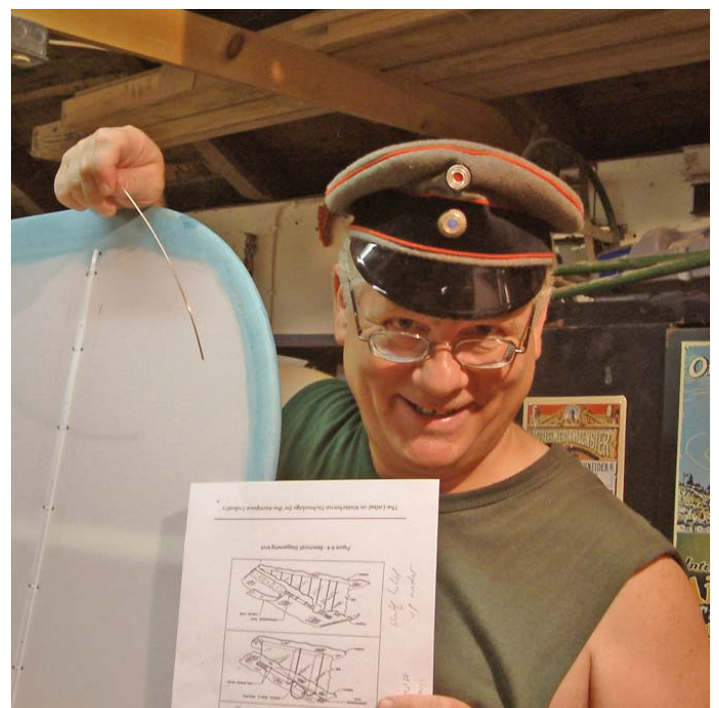
Lower wings were covered with a single wrap of the fabric, as its 72-inch width allowed a generous overlap. But the upper wings, with their 34-inch chord and curved upper surface, fell just half an inch shy of allowing the Stewart Systems' mandated 2-inch overlap of the glued seam on the trailing edge with the 72-inch wide cloth.

What's half an inch, you ask? Well, a half inch less means one would have only 75% of the mandated joint. Why cut the margin? So the upper wings were covered in two parts, lower surface and then upper surface.

A little fabric was wasted when the Baron expressed his dissatisfaction with the first covering of the fuselage bottom and ordered it redone. Hence the lightweight fabric was used up, and the decking covered in readily-at-hand Ceconite 102.

Final quantities used were:

- 25 yards of 72-inch width, 2.7 ounce Ceconite 102 (wings, tail);
- 8 yards of 66-inch width, 1.7 ounce light-weight Dacron (fuselage).



"He gives me the needle, I tell him to get knotted—we make a great team!"



The Baron hard at work spraying primer/filler with an HVLP gun.



The ailerons acquire a nice rounded leading adge after being covered.



***“I am a dancer,
not a seamstress!”***

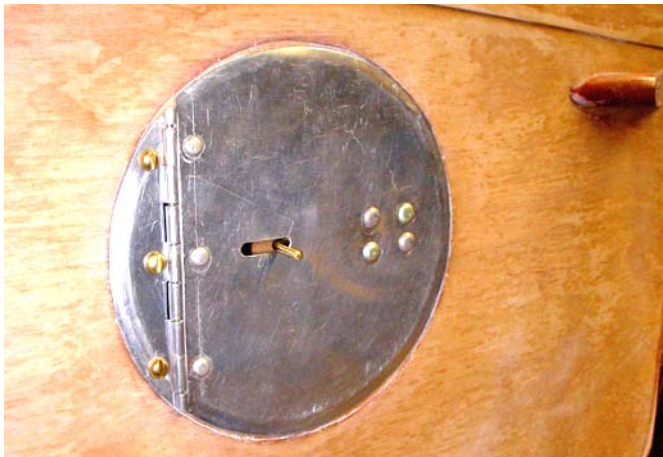


A large, Albatros-inspired inspection panel gives generous, easy access ...



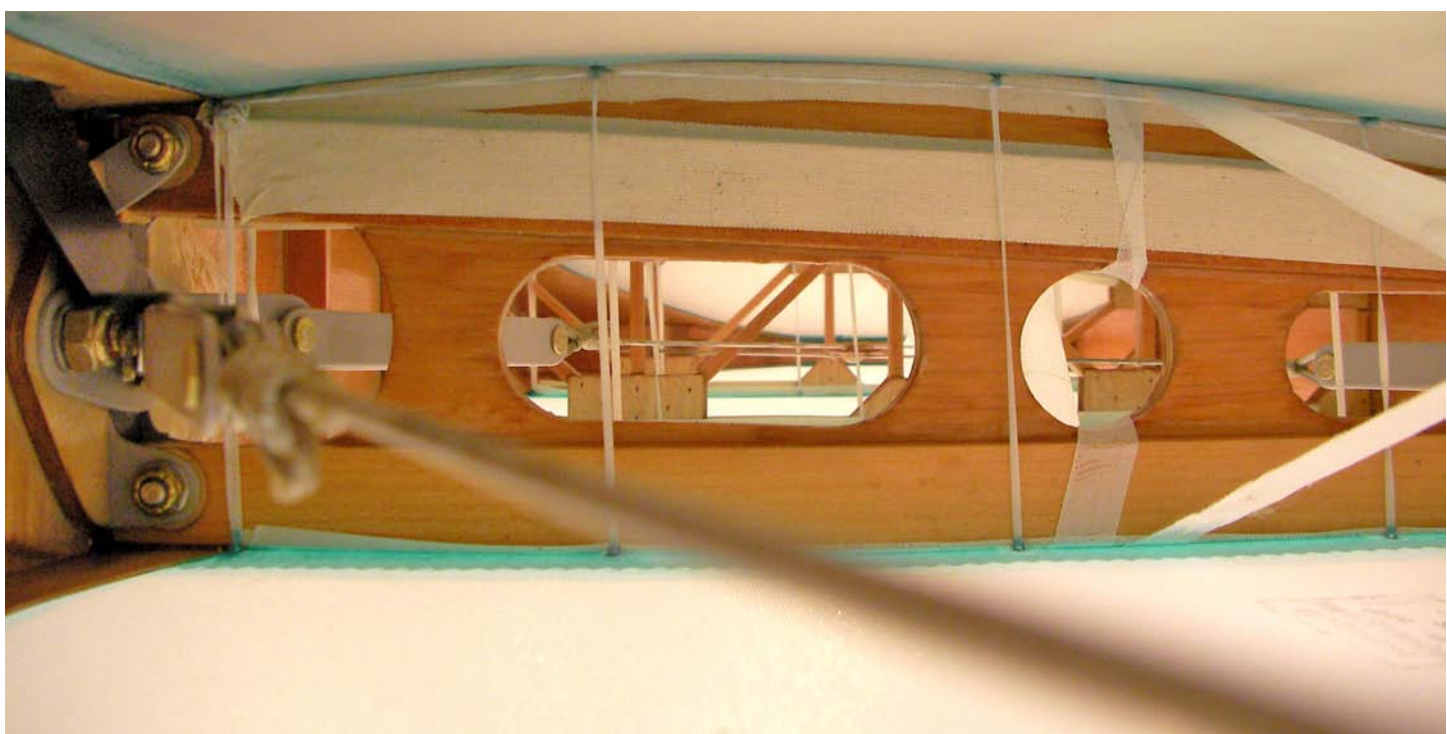
...to the aileron pulleys in the lower wings. Extra weight is minimal.

An Albatros Insight



Albatros-inspired access panel on the rear fuselage allows—well, access!

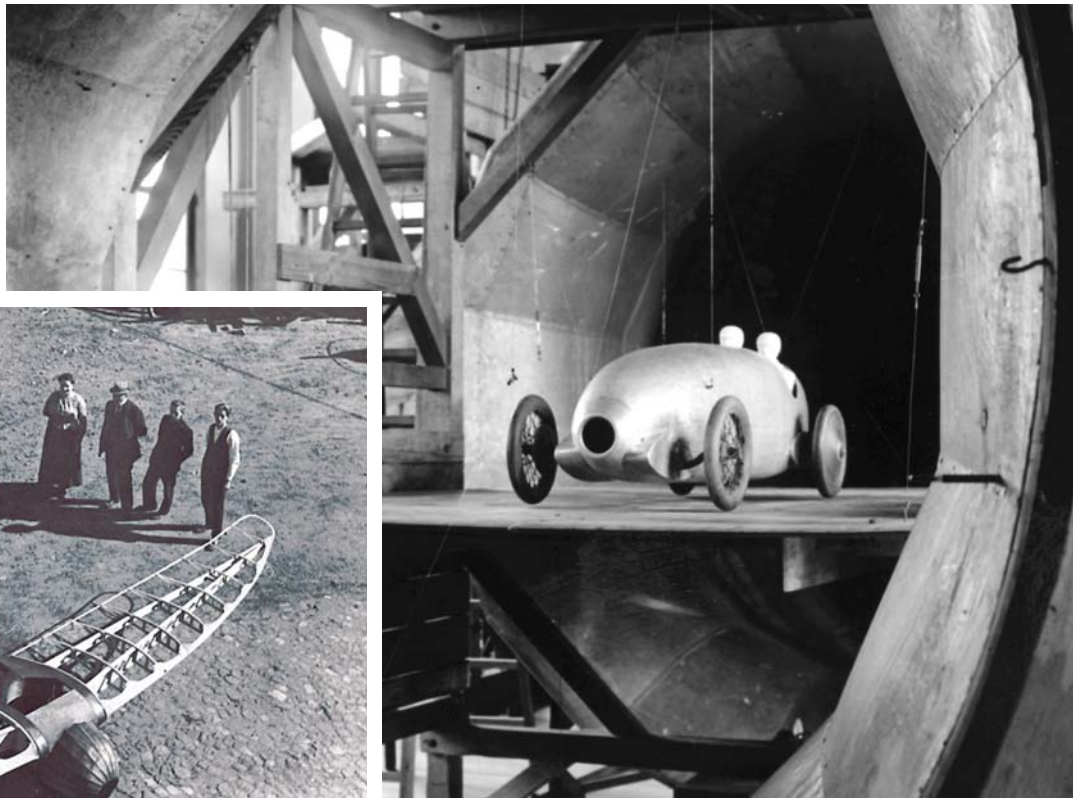
“Albatros made inspection panels to be useful. The idea is to be able to see and work behind them, often and easily.”



An insider's view: the Albatros panel allowed the camera to photograph the inside of the starboard lower wing, looking outwards towards the wing tip.

From the Morrisov Collection

Baron Ivan Morrisov helped rebuild a 1921 Lippisch-Falke glider while working as a flight instructor at the *Sportflug GmbH für Mittelfranken und Oberpfalz* at Furth, near Nuremberg, in the mid 1920s. He flew it often when not practicing for sports meets in the Morrisov Flitzer. He is seen with members of the restorations team, standing on the far left.



Bullet noses and teardrop shapes were all the rage in the 1920s. The Morrisov collection includes this photograph of a 1924 Daimler-Rennwagen in the same wind tunnel that was used to validate the bullet cowl and spinnerless propeller of the Flitzer design.



*Happy
New
Year!*

STÄAKEN
FLUGZEUGBAU
BERLIN