

C IV 255/17
Fok.FI 103/17
Fok.B.I
Fok.BRI 598/17
Fok.BV 2768/16

Fok.DRI 152/17

Achim Engels

Fokker's stencils

Military markings and factory applications.

An elaboration by the Museum of Aircraft Construction and Technical History



Fokker stencils

Another legacy of Roman administrative skill.

As a supplier of army aircraft, Fokker was subject to the contractual provisions of the respective order. As in any war, it is mainly about power and therefore about money. Money is paid for weapons that have been ordered. These weapons must fulfill certain conditions and should be able to be completed accordingly to the monetary terms. This requires a bureaucracy that makes it possible to manage each individual item. For this reason, contractual regulations were issued and written down in the so-called "Construction and Delivery Conditions for Army Aircraft", which every aircraft manufacturer who wanted to build and deliver aircraft for the military had to adhere to.

This was not done arbitrarily, but each aircraft offered was tested in the so-called type tests, including meeting a breaking load, before contracts for construction were concluded.

These regulations not only included specifications for the equipment, construction and specifications for the materials to be used, but of course also the marking of the respective aircraft with the military identifiers and serial numbers and manufacturer's markings.

These markings were painted on and attempts were made to speed this up in a certain amount of mass production. One possibility was the production of stencils that made it possible to spray, dab or otherwise apply the numbers and markings as quickly and uniformly as possible.

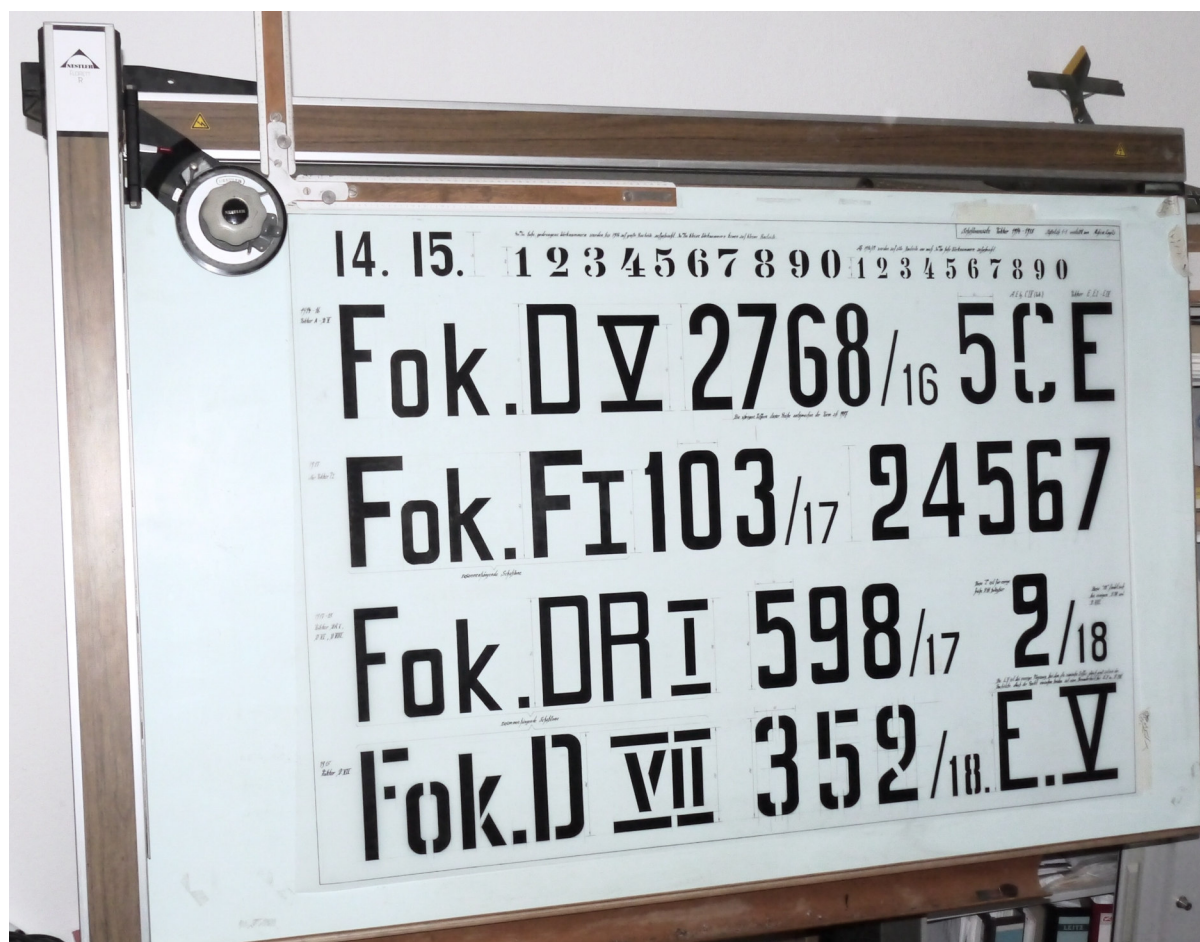
You may or may not consider it important what these markings looked like, but we here at the Museum of Aircraft Construction and Technical History are interested in what these markings looked like and how they changed in relation to individual aircraft types. After all, the First World War lasted 4 long years.

This article is intended to make it as clear as possible what the markings on Fokker aircraft actually looked like. In this article we would like to limit ourselves to the main markings for the time being and also deal with the other markings that were applied in a later article.

To illustrate and preserve the lettering used, we have created a plate that summarizes all the important elements on a 1/1 scale. The idea is to make the board available as a printable .tiff file at a scale of 1/1. For this reason, there are only a few measurements and historical notes on this board. On the basis of the measurements it is possible to print out parts intended for printing in the correct height and aspect ratio in order to make your own templates.

The main problem with the evaluation of font templates is that, due to their nature and different uses, the fonts produced may not look 100% identical. Since mainly black and white photographs are used as a reference, it can sometimes appear that they have a larger or smaller stroke width. That these have a larger or smaller line width. The sharpness of the respective photo can of course also distort the size in different places.

All the data collected here was determined manually and without computer assistance and the panel itself was drawn by hand in ink.



The first two years of the war, 1914 and 1915 from the Fok. A up to the E.IV

At the beginning of the war, the military demanded type designations and military order numbers as well as the abbreviated year of the order as identification.

This looked as follows and we will look at the year numbers first:

A.199_{/14.}



/14.

E 8_{/15.}



/15.

At this time, the number of aircraft in the German air force was still rather small and it soon became apparent that this system could easily lead to confusion with other manufacturers.

It was therefore introduced that the manufacturers were assigned abbreviations that were to become part of the respective identification. Fokker's abbreviation became "Fok."

New stencils became required in 1916.

It is not known where these stencils came from, whether they were obtained from local suppliers or cut themselves. The differences in the fonts up to 1918 suggest that they were cut at the factory itself.

The years /14 and /15 differ from those from 1916 onwards in that the font is thicker and there is a "hook" at the top of the "1". These years also have a dot after them. This is missing for the 1916 and 1918 markings and only appears again in 1918. There are also two different stencils for "/18" for 1918.

/16

/17

/18

/18.

The new form of the prescribed identification, preceded by the aircraft manufacturer, now read:

Fok. E I 58 /15

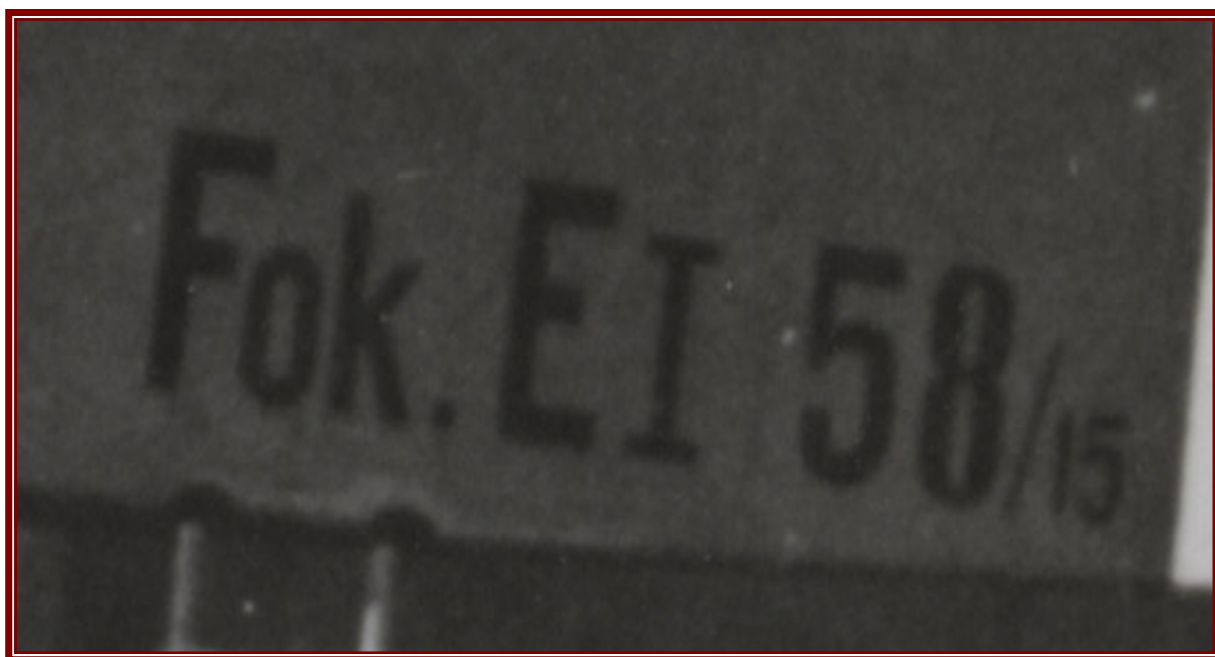
Manufacturer Aircraft type and type number Order Number Year of order

This established the form of marking for all German army aircraft and was retained until the end of the war. Manufacturer and type were two separate stencils. On the basis of the few photos available from the side, the photos cannot be superimposed congruently.

“Fok.” has a total height of 150mm with a font thickness of 18mm. The type designation has the same height and line width of 15 mm. The Roman numerals have a height of 135mm with a stroke width of 15mm and the Arabic numerals are just as large as the Latin letters with a stroke width of 18mm. The year numerals are 60mm high and have a stroke width of 8mm.

What changed at Fokker was the shape of the stencils, which is why we assume that they were cut by Fokker itself and not purchased from a supplier who mass-produced them uniformly. Apart from minor changes to the shapes of the Latin letters and Roman numerals, the stencils basically remained the same. One striking change was the shape of Arabic numerals used.

Until 1916, i.e. until the production of the Fokker D.V, rounded numerals were used as individual stencils.





Fok.D II 2387/16



Fok.D III 352



What is interesting about these templates is that there must have been two different "k"s. Some photographs show the small "k" with a flatter, shorter right foot and others, as in the photos shown here, have a steeper and therefore longer leg.

Fok.DIV 2768/16

Stencil with bars/bridges

One thing stands out with all these markings. As these are templates, they have bridges to hold internal parts in place. These are rarely visible. In most cases, however, you can clearly see that they have been painted over. In addition, many photos show conspicuous edges on the letters. This is due to the fact that the stencils were probably not used for dabbing on, but were used to mark out the lettering with a pencil and then drawn out with a brush. This drawing out with sign paint has the effect that the brush creates a "wave" on the outer edge, which is more opaque and sometimes reflects in the light because it builds up a certain height. We were able to replicate this effect with test signs, which we will also show below. The effect does not occur when dabbing or spraying. It can only be achieved by manually filling out.

A.E.G. CIV (Fok.)

In 1916, when Fokker had no aircraft in development or under construction that was of interest to the military, he felt compelled to build an aircraft that could be ordered by the military from a competitor, but could not be produced by the latter in the desired quantities. This was the A.E.G. C IV.



C IV 255/17

Stencil with bars/bridges

A new set of stencils for the Arabic numerals appears for the first time on the D.III. This contains a distinctive "2". The new numerals were all much more angular. However, photos also show that the old rounded numerals continued to be used in combination with the new ones. **C IV 255/17** is a good example of this. Another striking feature of the CIV is that the Roman numerals were just as large as the Arabic numerals and the Latin letters.

Fokker FI

It was not until August 1917 that Fokker returned with an aircraft that was of interest to the military. This was the prototype of the triplane.

As there was still no class designation for military triplanes, these were initially designated "F" by the inspectorate of the air force as a continuation of the A, B, C, D, E series.

At Fokker, new templates were cut for the front testing of the two pre-series triplanes **Fok.FI 102/17** and **Fok.FI 103/17**.

On these, "**Fok.FI**" was cut as a continuous stencil and the Latin numerals and the year were each cut as individual stencils.

A photo of Werner Voss' 103/17 taken exactly from the side allows the exact shape of the stencils to be determined. We have reproduced this fuselage side piece as a decorative piece and our replica can be placed exactly on the photo of the aircraft if all known dimensions of the fuselage and the painted cross are replicated exactly.



Werner Voss in his **Fok.FI 103/17**

Fok.FI 103/17

Stencil with bars/bridges



Enlargement of Werner Voss' identification



Reproduction of the fuselage covering and identification of 103/17 as a decorative piece



Based on this match with this wonderful photo, it can be proven that it was a new stencil that was made. It is also identical to that of **Fok.FI 102/17**.

The height of the lettering for "**Fok.**" is 145mm. The stroke width on the capital "**F**" is 20mm, on the lower case letters only 15mm. The Roman "1" is 115mm high with a stroke width of 15mm. The bridges on this Roman "1" are painted on both 102/17 and 103/17. The Arabic numerals here are now 140mm high with a line thickness of 18mm.

Fokker DRI

When the aircraft finally went into series production, the inappropriate class "F" was replaced by the more suitable class designation "DR".

A new stencil was cut for this purpose. Obviously, the characters "**Fok.DRI**" were connected, the numbers **123456789** were individual stencils and the year /17 was again a separate stencil.

It is not possible to place these on photographs congruently with those of the FI, but they work together again. So again a separate stencil was cut. The person who did this only roughly copied the dimensions of the FI. The font thickness for "**Fok.**" was only 15mm, the height was 150mm. The letters "**DR**" had the same dimensions. The Roman 1 was now 135mm high. Strangely enough, the bridges on the Roman "1" were not painted on any of the DR aircraft. But all the other bridges were. The Arabic numerals remained unchanged since the FI. They were therefore adopted unchanged.

We have also made a 1/1 illustrative piece for this. In this case for Richthofen's **Fok. DR I 152/17**. On this aircraft you can also see very clearly that the numbers were not dabbed on but painted in. Obviously too much paint was used for the "1", resulting in a tear running downwards, which the painter concealed by extending the 1 downwards.



Fok. DR I 152/17

Stencil with bars/bridges

Fokker E.V / D.VIII

This series of stencils with the numbers was also used for the D VI and the E.V.. However, a new "E" was made for the E.V. It seems that only the "F" was changed from "Fok." was changed, as the upper part corresponds to the "F", while the lower arm is slightly longer. The Roman "V" of the **E.V** is also the same size as the Latin letter. And the E.V is also the only aircraft since 1915 to have a dot after the type class and before the type number. This is also retained on the **D.VIII**.



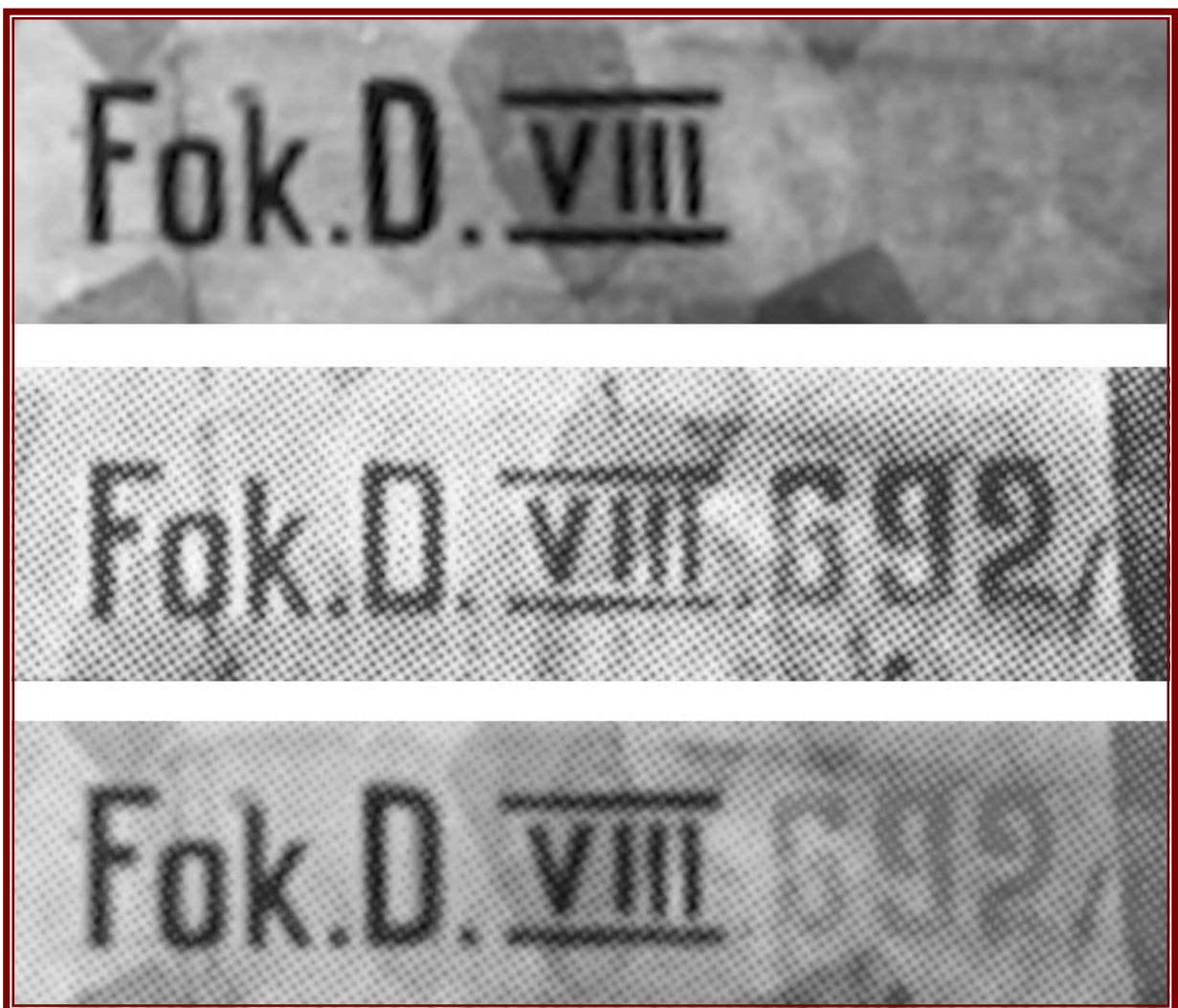
Fok.E.V 143 /18

Stencil with bars/bridges

On the basis of the D.VIII and photos taken exactly from the side, it can also be proven that the templates for "Fok. D.VIII" are contiguous, as they can be placed on top of each other. These two photographs also show how the letters look different when they are colored in by hand. In the top photo, the "D." looks much rounder.

Fok. D.VIII 596/18.

Stencil with bars/bridges

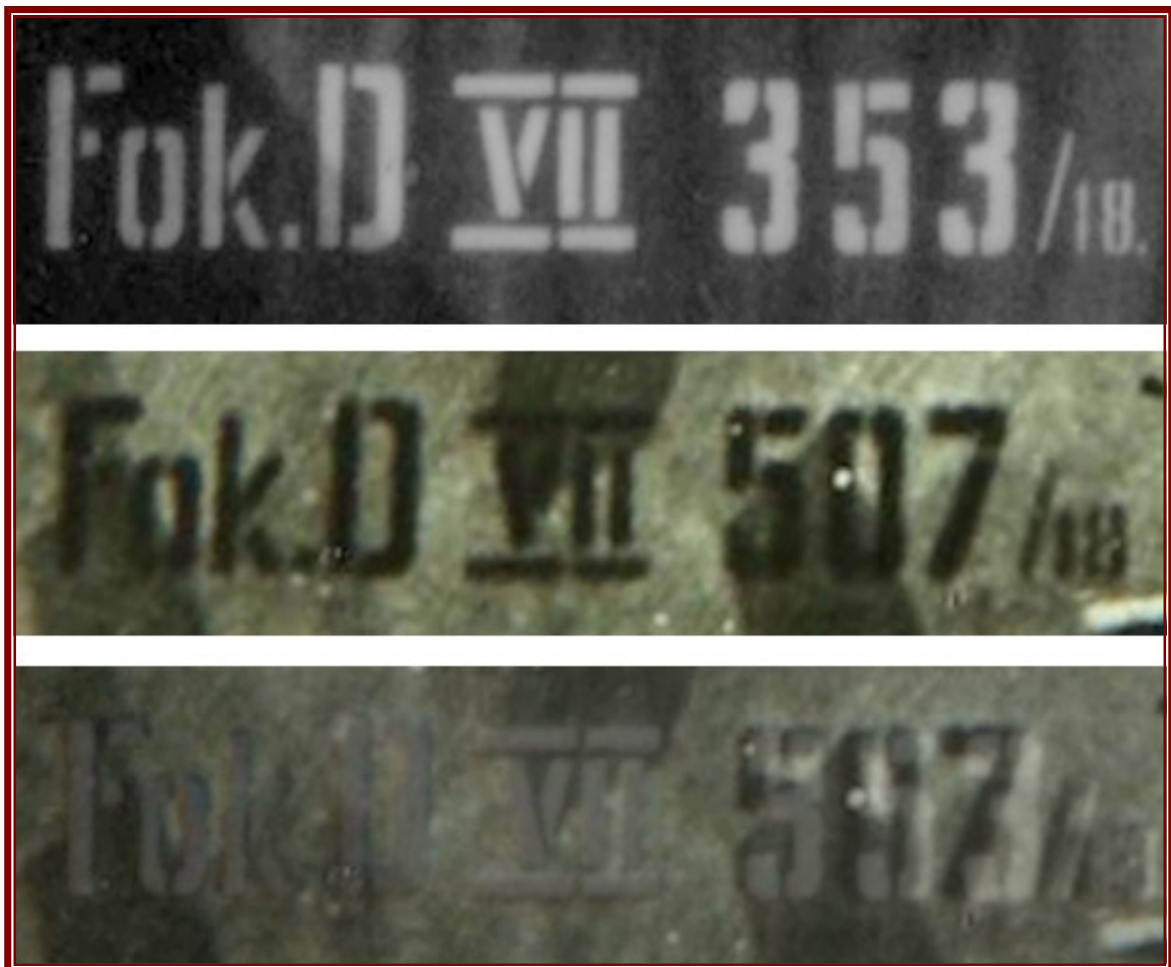


Fokker D.VII 1918

The last major change came with the production of the D VII. Here too, new templates were cut with slightly different dimensions.

The height of the "Fok." is now 145mm with a stroke width of 18mm. The "D" has the same dimensions. The Roman "7" is now 135mm high again, the same as on the triplane, but the Arabic numerals are now the same height as the Latin letters, i.e. 145mm and also 18mm thick. Their corners, which appear relatively sharp, have been rounded off more than on the triple-decker numerals.

It is now also increasingly common that the bridges were not painted over, or that they were stippled instead of painted. In addition, Fokker probably made an attempt to apply the markings in white. Here, too, it can be proven that the part "Fok. D VII" was a continuous stencil.



Fok.D VII 355/18.

We have also replicated this white marking for our museum on an illustrative piece. The remarkable thing about this is that the construction and delivery regulations for army aircraft did not specify a color for the markings until the 1918 edition. The 1918 edition was the first to specify that the lettering had to be black. This is presumably due to Fokker's experiments with white. Fokker had not yet used white lettering before 1917/18.

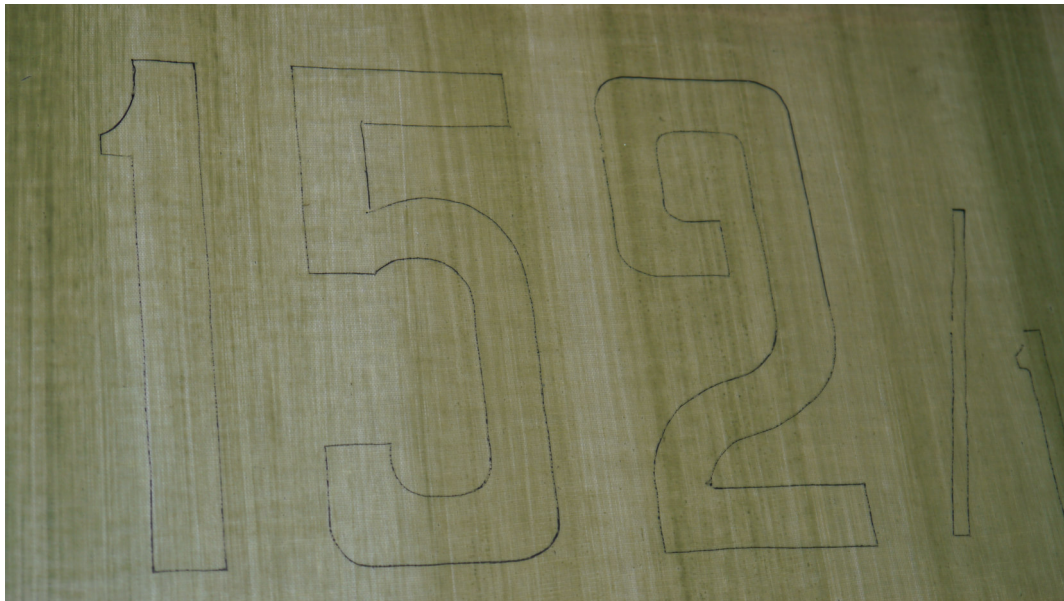
There was an oddity with some of the very early D.VIIs. The already rather funny "2" was even more disfigured here.



This can only be proven for **247/18** and **252/18**, but it is not clear how many of them were designed in this way.

Using the surviving piece of fabric from **Fok. D.VII 252/18** as an example, we would like to briefly discuss the effect of the reinforced or darker edges of the numbers.

If you know that this edge exists, you can also see it in numerous black and white photographs. We were able to replicate the effect by using the stencils to outline the identifier with a pencil. We then filled in this outlined identification with a brush. By drawing out the lettering within the marking, waves of color are thrown up on the left and right of the brush. In these areas, the paint is applied thicker than in the inner area of the letter or number.



Numbering marked out using a template.



Finished lettering. Pulling out the lettering by hand results in a darker edge. In addition, the edges are never 100% straight but also look freehand.

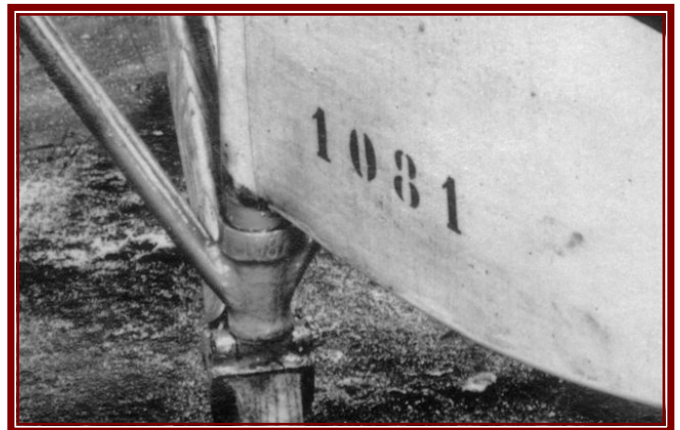
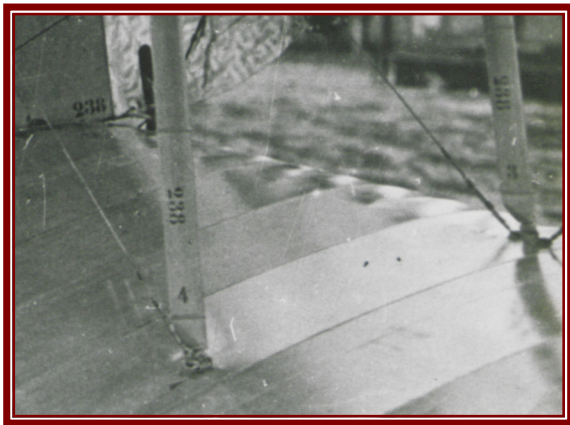
The serial numbers

In addition to the military markings, serial numbers were also prescribed for individual parts of the individual aircraft. These were consecutive numbers assigned by Fokker and applied to all components of the aircraft that could be removed.

Until 1916 Fokker used two different sizes. 40mm high numbers were applied to large parts. 30mm high numbers on components such as struts, which offered less space.

From 1916, with serial number 1025, it can be proven for the first time that the large numerals were no longer used.

The only difference between the two sizes in the typeface is that the larger version was somewhat more corpulent.

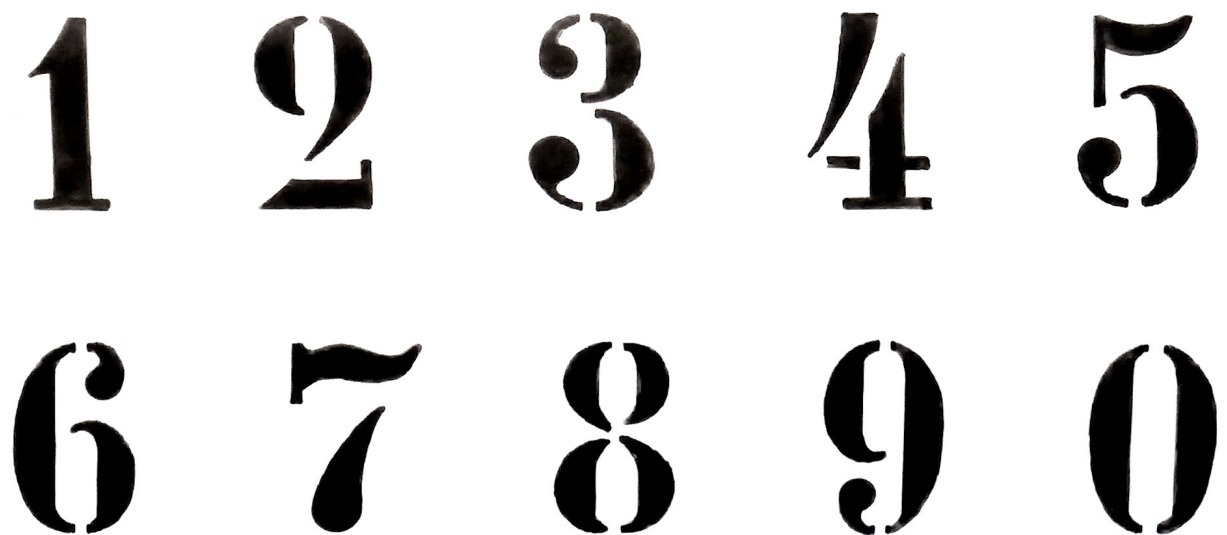


Large and small font sizes used together





The work numbers never looked 100% neat due to the dabbing. Our graphics are not intended to represent perfect numbers, neither with regard to the other markings nor with regard to the work numbers, they are intended to convey the nature of the job and the shortcomings in the craftsmanship.



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**Museum für Flugzeugbau
und technische Geschichte**

Achim Engels, Heubeundstrasse 1, 73116 Wäschenbeuren – Germany

engels@fokker-team-schorndorf.de

<http://www.fokker-museum.de>

Do not open red turnbuckles

Open blue turnbuckles

The next markings are often displayed incorrectly. These are the markings on the upper side of the wings of all monoplanes with wing twists.

Our Dutchman's airplanes were extremely cleverly constructed. They could be assembled and disassembled by releasing 4 turnbuckles. These were marked in blue. All other turnbuckles were painted red and could not be released. By releasing the blue turnbuckles, the entire structure lost its tension and the red turnbuckles could simply be unhooked. This eliminated the need for any adjustment work during assembly.



A corresponding two-color inscription was applied to the upper side of the wings. As the blue was very low-contrast, it hardly ever stands out in black and white photos, which is why the second line is often overlooked and not shown in replicas and models. The red is more conspicuous and appears almost black. That's why you often see the lettering on models in black and on a single line - if at all. This is wrong and makes no sense. Of course, the turnbuckles should also be painted accordingly.

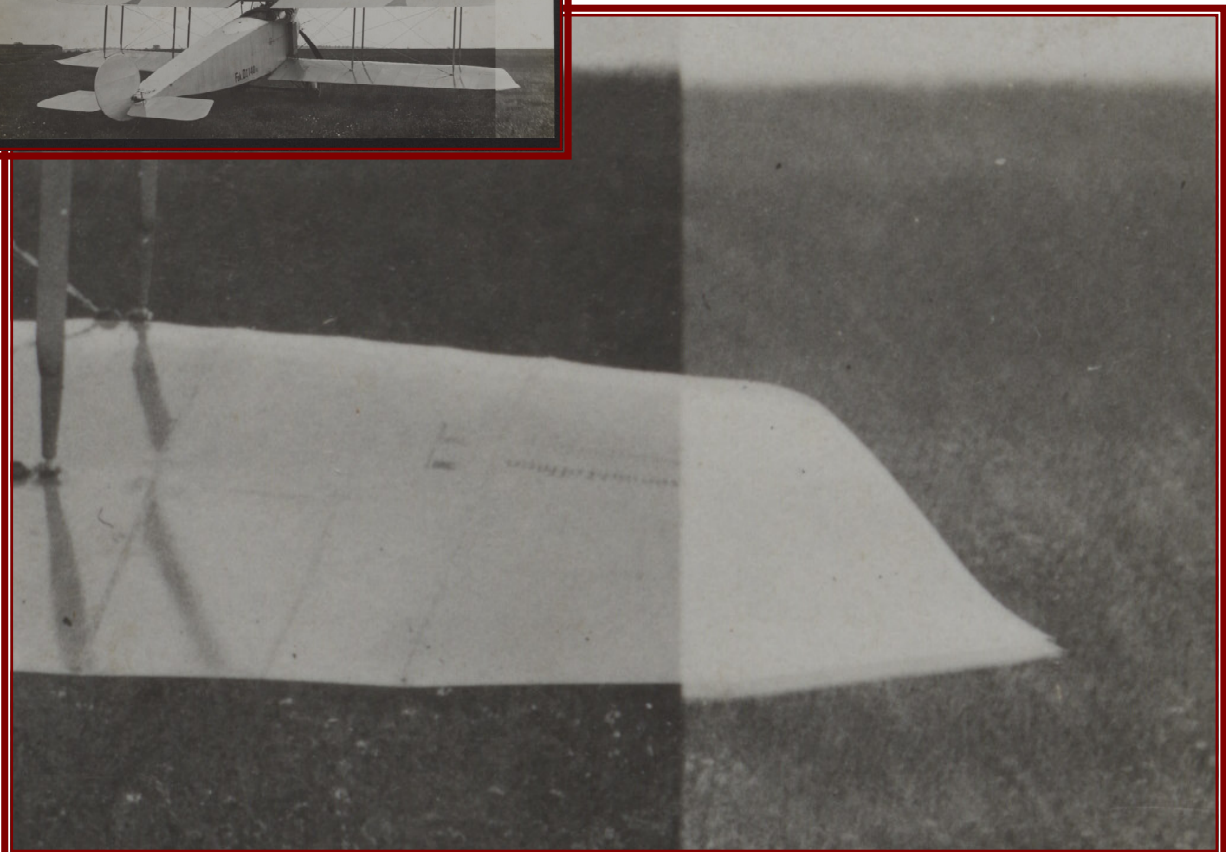
In addition to the words, there are small warning flags painted in the appropriate colors. These are always on the side facing the hull.

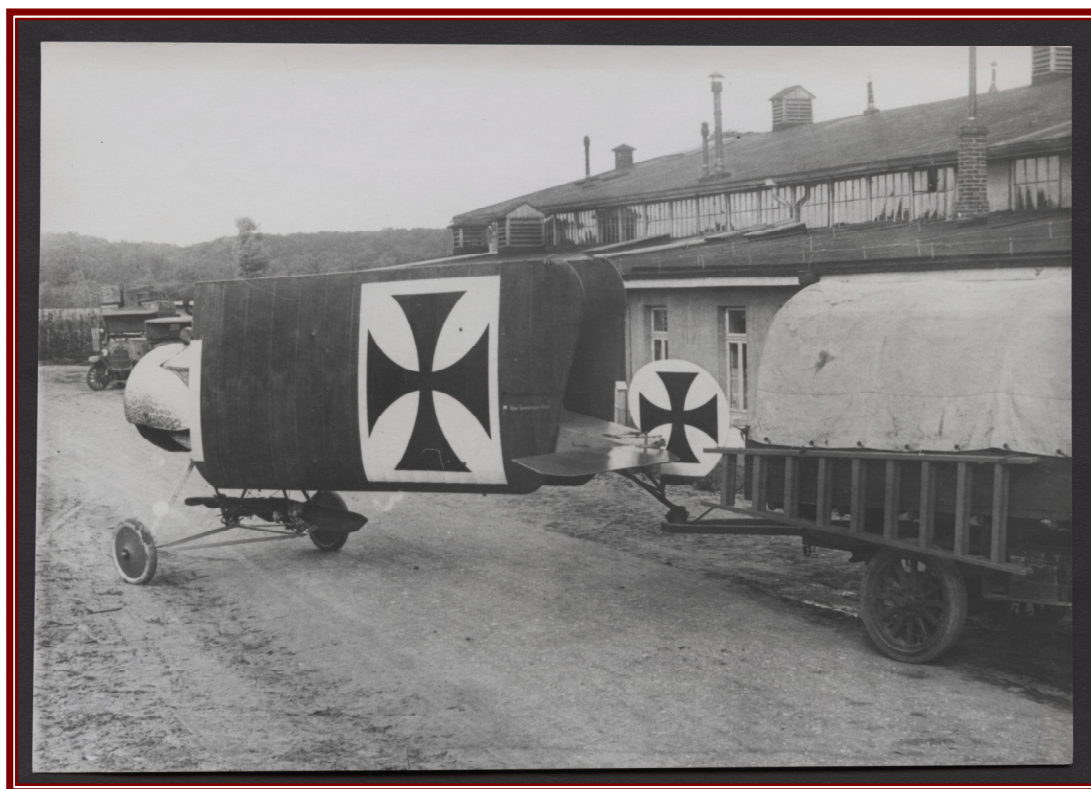
The marking was first found on Fokker A.I from 1914, so it was already present at the beginning of the war.

The marking is then also found on the biplanes with wing warping and loses its meaning with the introduction of the ailerons. However, since there are also photos of Fokker D.II and D.III with the inscription, it can be assumed that these are wings that were completed beforehand and continued to be used.



Fokker D.1 with wing warping





Monoplane with the respective marking

Il existe un dispositif de fixation des ailes sur le côté du fuselage pour le transport, dispositif déjà réalisé en France avant la guerre.

Les tendeurs des haubans sont de couleurs différentes, bleu et rouge: une légende, peinte sur les ailes, indique ceux dont le démontage déréglerait l'appareil.

L'aile droite porte un logement pour la boussole (v. photo

A - Wings.-

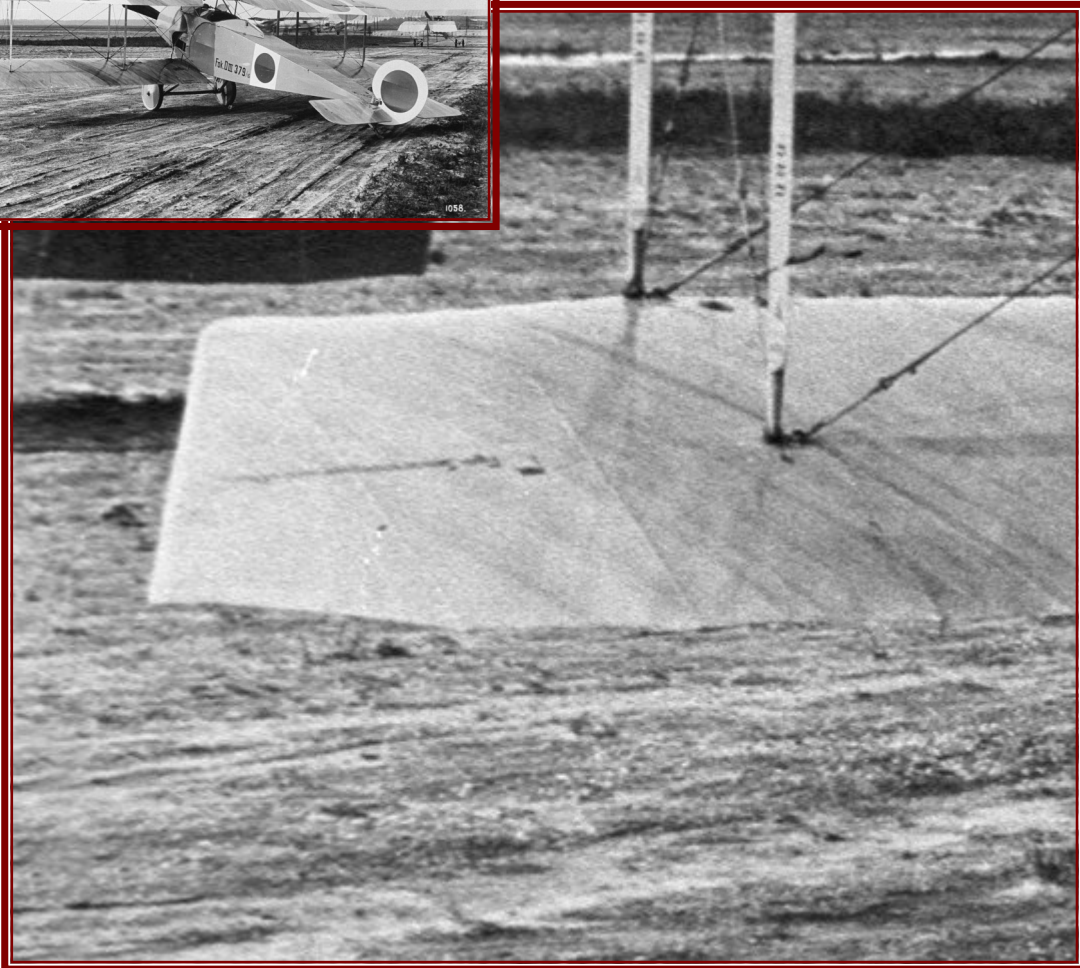
The wings of the "MORANE" style, have a special profile, showing a slight S-curve. They are secured to the fuselage by tubes forming a linchpin. Dismantling and assembling are very rapid.

There is a device for fastening the wings to the sides of the fuselage for transportation, such a device having already been in existence in France before the war.

The stay-tighteners are of different colors, blue and red; a legend painted on the wings indicates those whose loosening would disorder the aircraft.

The right wing contains a housing for the compass (see photo

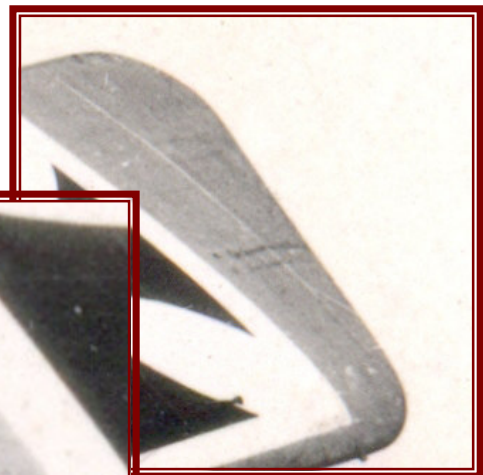
French capture report on Fok. EIII 196/16 in which the different colours and the inscription is mentioned.



Fokker D.III, the blue coloured line is easily overlooked in this low contrast image.



Serial production of wings. All carry the twin line marking.



Images of my own E.III showing the differently coloured turnbuckles. Loosening the blue ones allows the red ones to be unhooked.



Rote Spannschlösser nicht öffnen



Blaue Spannschlösser öffnen



Available as full size printable file on our plate No. 1.

"Support here"

This marking was attached to the sides of the fuselage directly in front of the tail unit on all Fokker aircraft up to the D.IV.

In this article I would like to show you how to reconstruct such a marking and which points have to be considered.

First of all, I would like to explain that I am not interested in replicating a marking. My aim is to reconstruct the appearance of the stencil with which the marking was applied. Today it is no problem to replicate the existing marking using a computer and every marking looks the same, but that was not the case back then. Each dabbed marking has its own shape.

It is important to understand that a mark applied must never necessarily be identical to the shape of the stencil. It can be indistinctly dabbed, the stencil can slip, indistinctly dabbed markings can be subsequently painted out by hand with a brush.

But how can you then manually define and replicate the font type and size of the marking?

This basically requires either an original piece of fabric or a photo showing the lettering as vertically as possible. If you don't have this, it will be more complicated, but it is also possible.

In the case of the "Support here" marking, we have exactly vertical photos in good quality, one of which I am using here as a basis.

The photo in question can be dragged to the original size. Known dimensions on the airplane help with the calculation. The lower case letters in this marking have a height of 20mm. If you now simply copy this roughly, you have all the letters in their arrangement, rough shape and size, as well as the overall dimensions of the template.



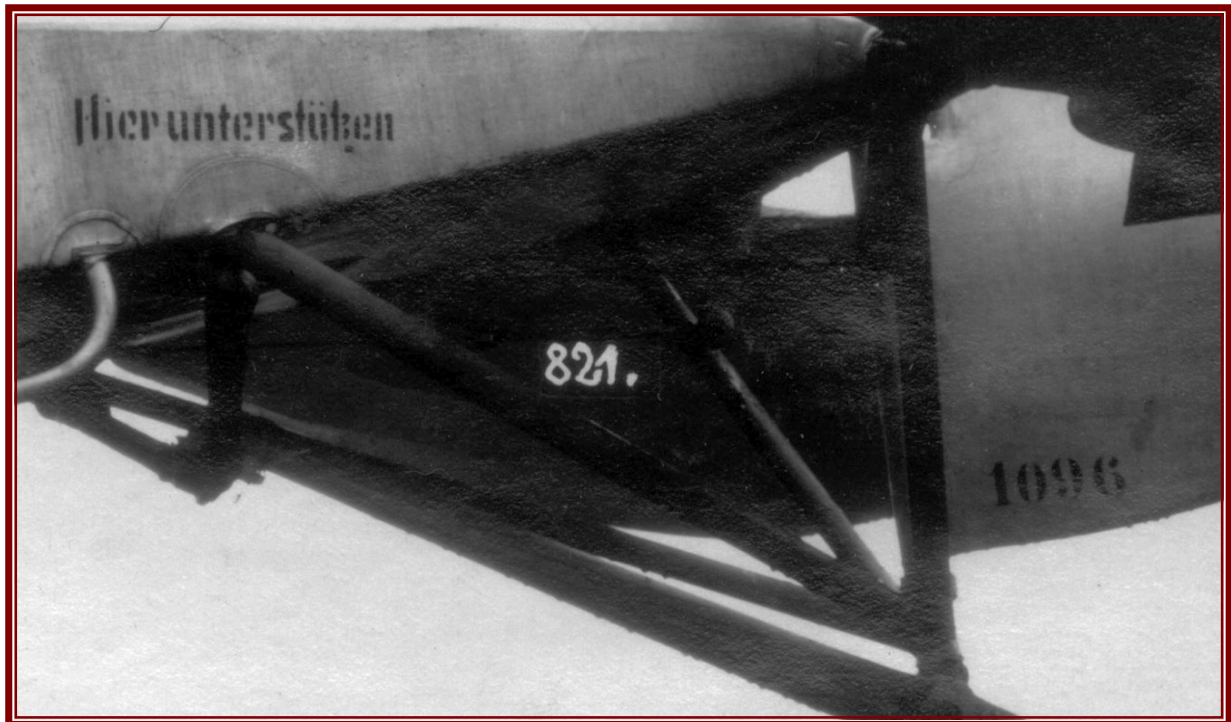
This traced rough sketch can now be placed on the drawing board and measured. This has shown that the letters, with a height of 20mm, have a design width of 13mm, the line spacing is 4mm and the distance from letter to letter is almost exactly 5mm.



Due to the dabbing and possible distortion of the photo, these measurements are of course not 100% accurate. However, this does not mean that the template was not accurate.

If you now go and construct these measurements for each letter, you get a surprisingly congruent image. This means that the construction of the letters is correct. This construction is now first applied with vertical and horizontal lines, then the curves of the letters are drawn in with a pencil.

The vertical and horizontal lines are then traced in ink, followed by the curves. The resulting letters can then be filled in with ink and voila!



4. Kennzeichnung der Unterstützungsstellen.

Am Rumpf und an den Flügeln sind diejenigen Stellen, an denen angehoben oder gehalten werden kann, durch Striche und Pfeile in auffälliger Weise zu bezeichnen, z. B. „hier unterstützen“, „hier anfassen“.

Extract from the construction and delivery regulations stating that these markings have to go on.



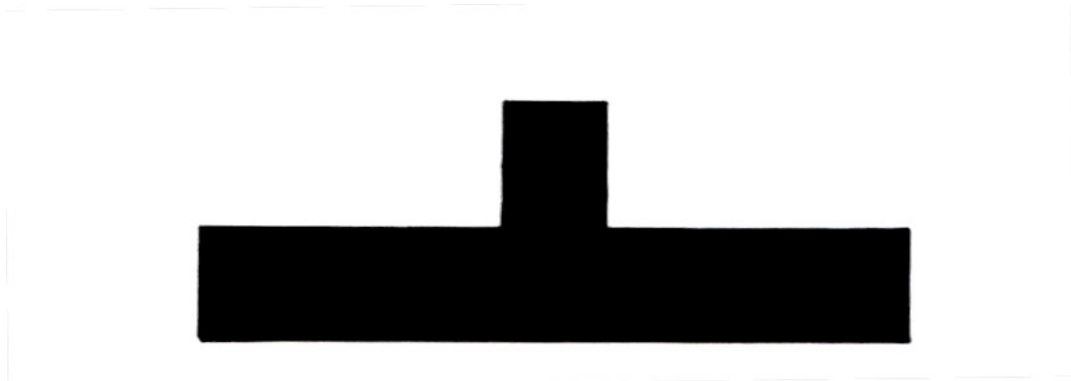
Inscription „Hier anfassen“ (touch here) with its respective position marking.

Hierunterstützen

“Support here”

Hier anfassen

“Touch here”



These markings were painted directly on the outside of the fuselage tubes. Presumably the inscriptions and these markings were dark red, but this can no longer be traced.

These markings are no longer to be found on Fokker aircraft from the Fokker F.I onwards, although the construction and delivery regulations clearly require this.

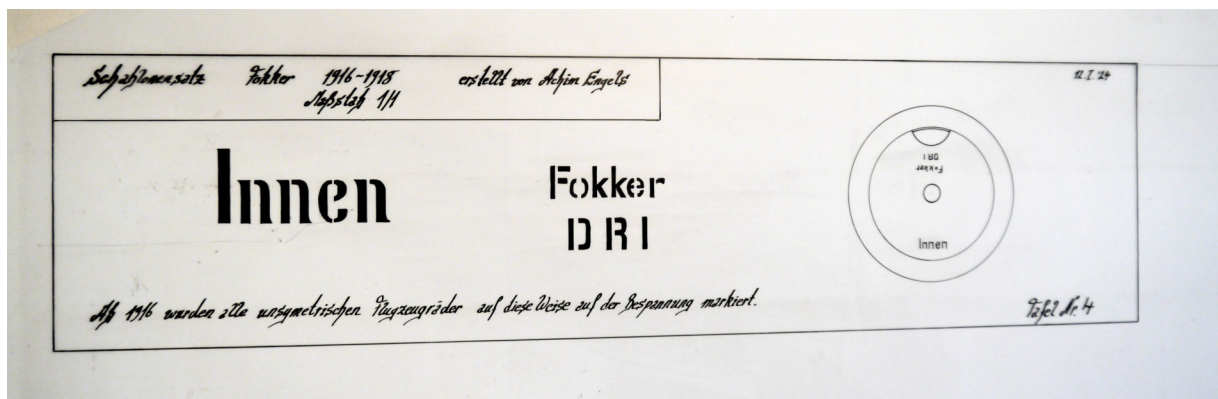
"Inside"

Since the introduction of asymmetrical aircraft wheels, the spokes of Fokker aircraft were marked "inside" on the inside. From the triplane onwards, the company suffix "Fokker" and the type were added.

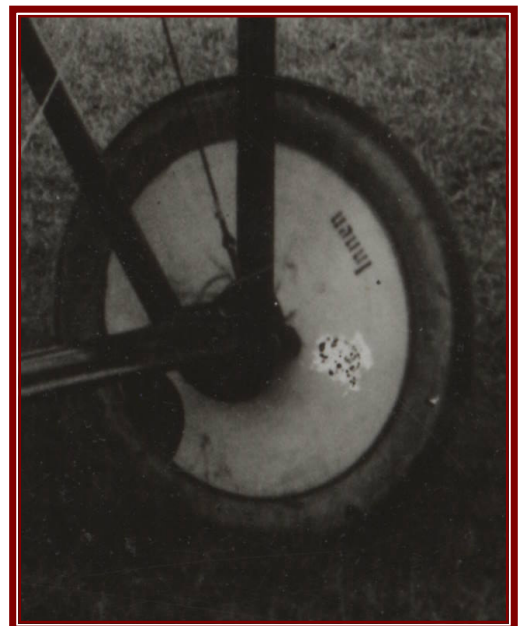
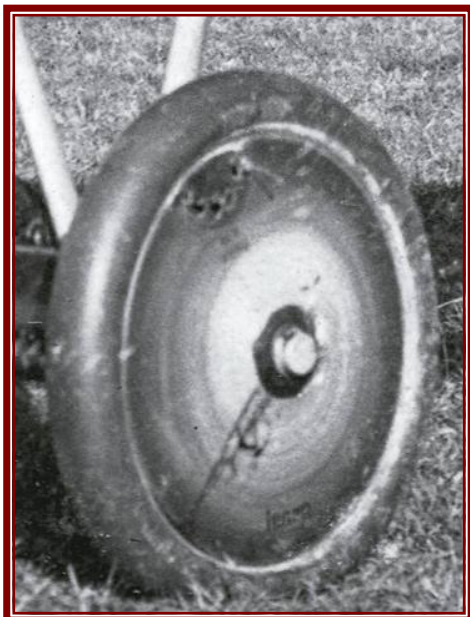
These markings are difficult to recognize in photos, but again, if the photo quality and perspective are right, you can see it if you know where to look. It is helpful if the wheels have been mounted upside down to increase the track width despite the inscription.

This practice was used on unpainted wheels as well as on the painted wheels of the D.IV, D.V and Dr.I or the aircraft fabric-covered wheels of the D.VII or E.V/D.VIII.

Prototypes often had no type designation but instead had the V-No. of the prototype dabbed on.



Innen





"Angle of attack"

In accordance with the construction and delivery regulations for army aircraft, each aircraft had to be flown in. The best angles of attack determined in this process had to be written on the wings after the measurement flights at the respective nodal points.

Apparently this was handled slightly differently at Fokker.

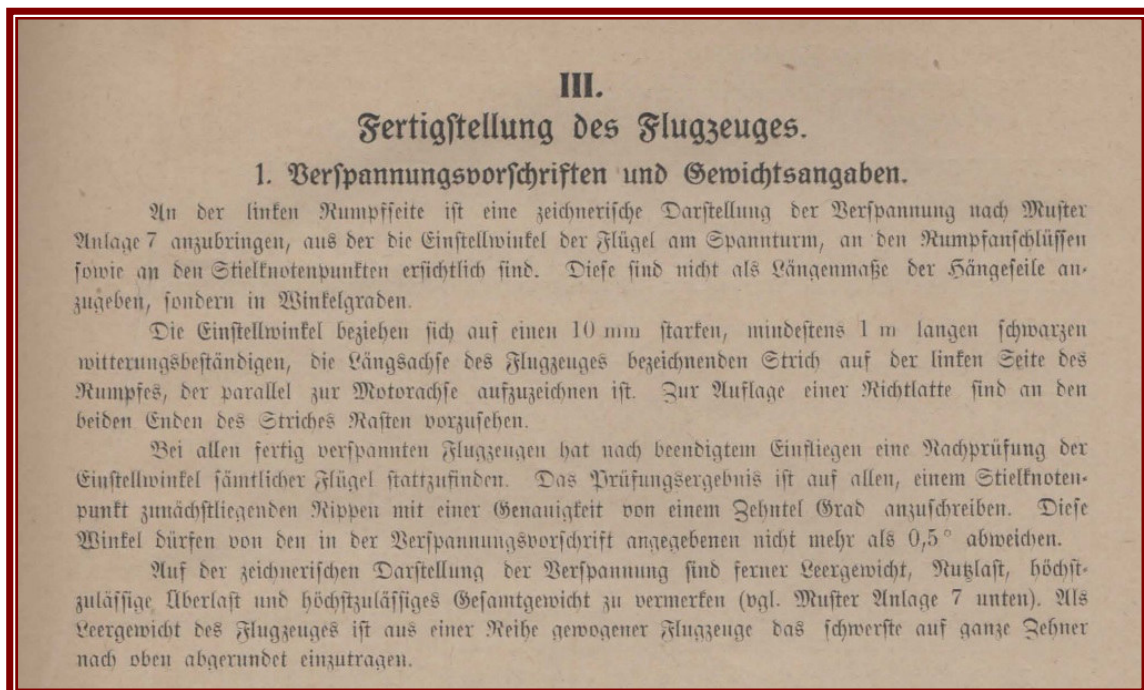
There are factory drawings that show where which markings should be applied, and the number of degrees was also specified. Either the meaning of the regulation was not understood or it was done because it was wanted.

The inscription cannot be verified for the early monoplanes, but it appears for the first time on the D.III, then on the D.IV and the D.V, and for the D.VII and the E.V/D.VIII it can be verified by photographs.

It was applied both in white and in black.

It is often not visible in photos. Either the photo quality is too poor or the lettering has been lost.

On the triplane and the D.VI, for example, it is not to be found at all and instead of being applied to every node as required, it was only applied to the fuselage nodes. I attribute the fact that Fokker got away with this to the self-supporting design of the wings, which did not require geometric bracing and had their own aerodynamic bracing.



Manufacture and delivery regulations talking of weighttables and inscriptions of "angle of attack"



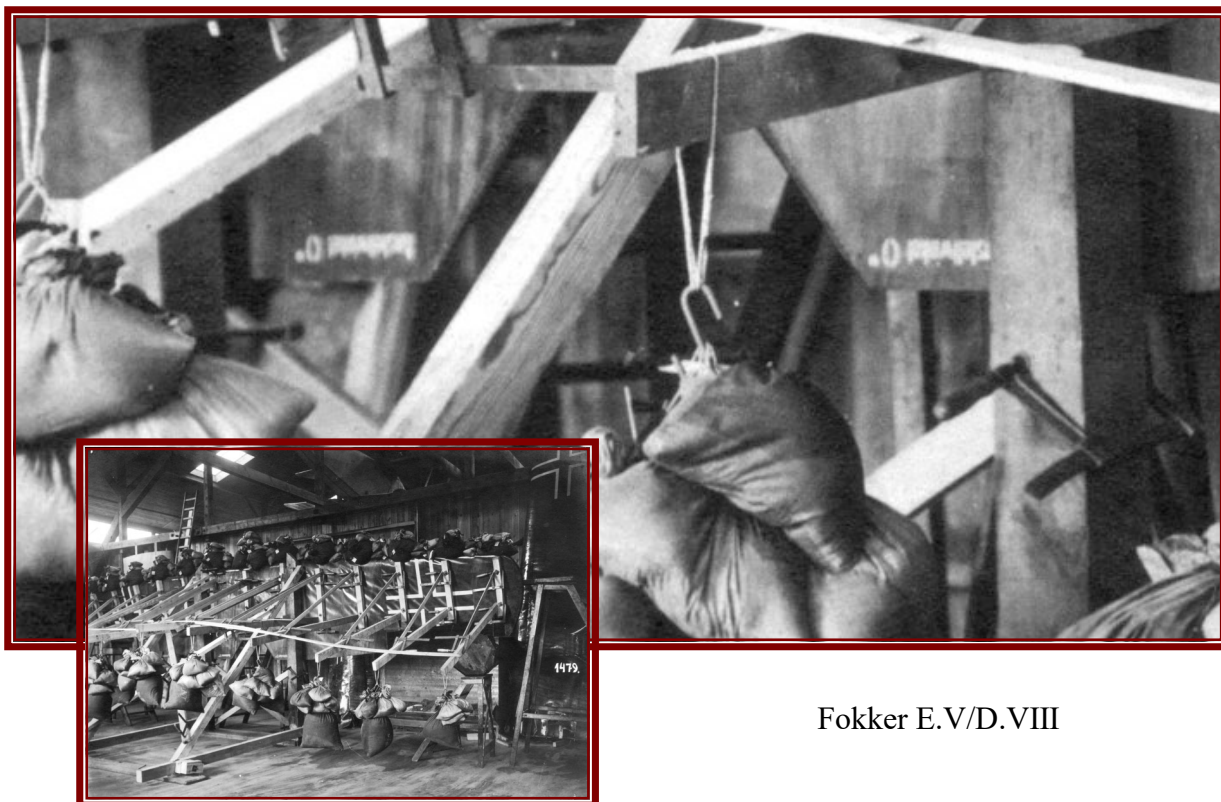
Fokker D.III



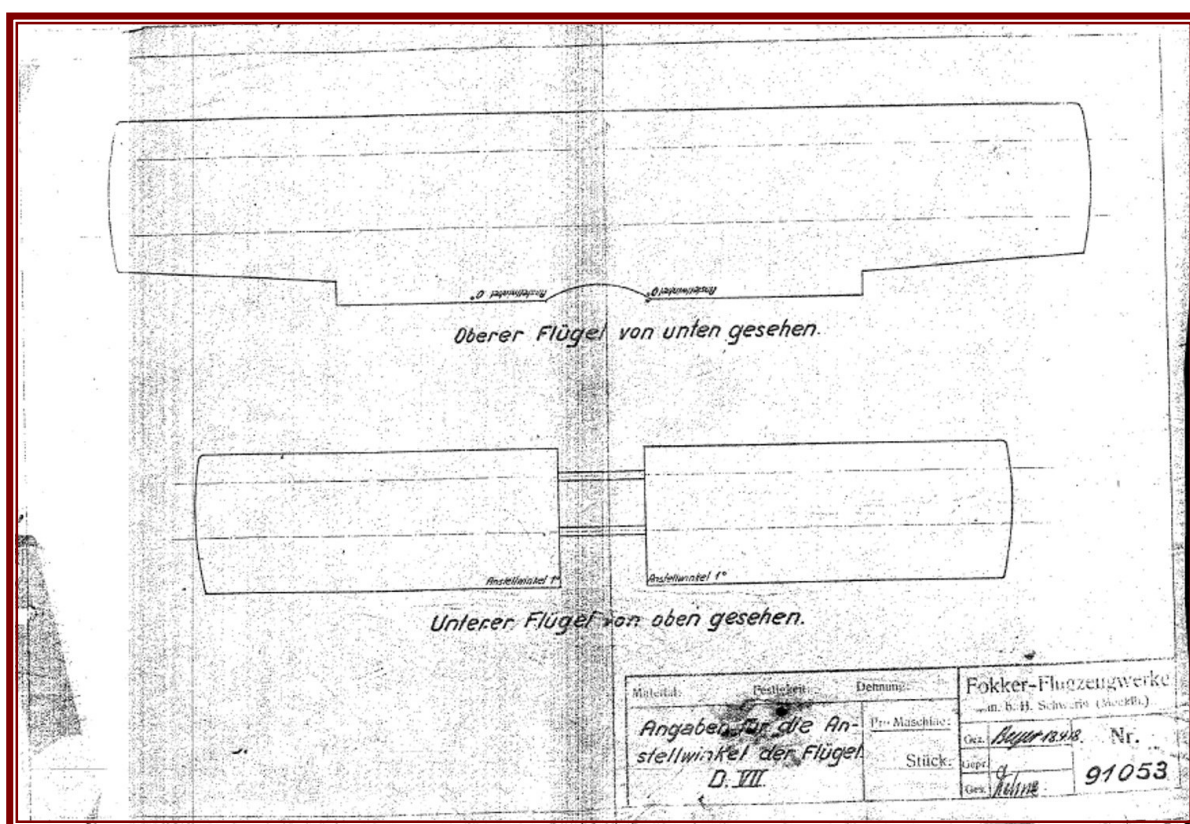
Fokker D.V



Fokker D.VII



Fokker E.V/D.VIII



Factory drawing for the D.VII given what and where it was to be put on as a marking.



<i>Schriftmensatz Fokker 1916-1918 erstellt von Albin Kugelz</i> <i>Stapelsatz 1/1</i>				B.I. 24	
<i>Fok. D.VII</i> <i>Ober- u. Unterflügel</i>		<i>Fok. D.VII, E.V./D.VII</i> <i>Oberflügel</i>	<i>Fok. D.VII</i> <i>Unterflügel</i>	<i>Fok. D.V</i> <i>Ober- u. Unterflügel</i>	
Anstellwinkel		5°	0	1	7
<i>Nachweisbar in weiß und schwarz an Fok. D.III, D.IV, D.V, D.VI und E.V./D.VII</i>					<i>Tafel Nr. 5</i>

Availiable as full size printabe file.

"Do not step on the fairing"

A marking that did not originate from Fokker itself and that hardly anyone knows about

When the first series-produced triplanes went to the front towards the end of 1917, they were the first aircraft to have this new and strange axle fairing. The structure was lightweight and not designed to be stepped on.

The planes were transported and loaded by rail from Schwerin and the loading masters there were responsible for loading them. Aircraft were generally transported with the wheels removed. The axle was firmly mounted on the flatbed wagon to secure the load and the wheels were stowed separately under the aircraft.

However, the problem was that this fairing was extremely inconvenient and in the way. Apparently some of the cladding was damaged when railroad workers stepped on it.

The railroad then applied a marking during loading from Schwerin. The fact that it was not a Fokker imprint can be deduced from the fact that not a single aircraft that was photographed on the airfield in Schwerin-Görries has this marking. It is also applied in white. Fokker lettering of this type was all black. The railroad mainly applied white lettering and used the standard font introduced by the Reichsbahn, which is still a standard in Germany today (DIN 1451).

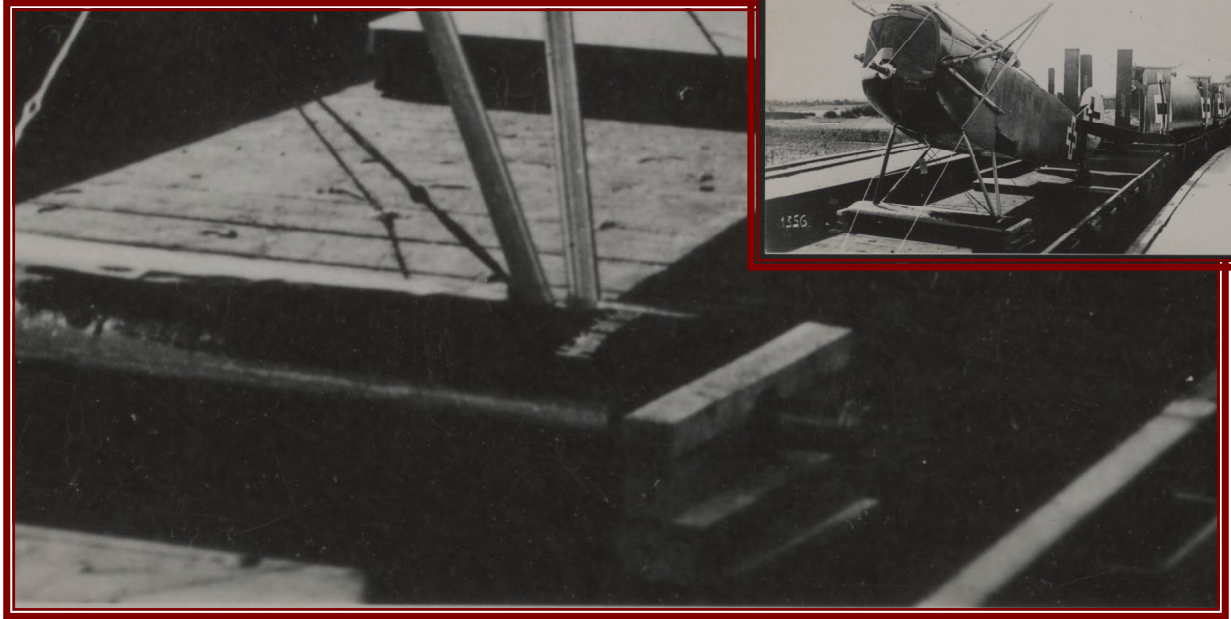
The lettering is difficult to make out in photos because of the place where it was applied and cannot be traced at all for the triple-deckers. However, it can be seen - if you know where to look - on Fok. D.VII, Fok. D.VI and Fok. D.VIII.

They are not often seen in the field. I put this down to the fact that the aircraft were actually finished, i.e. all painted surfaces were sealed with boat paint. A marking quickly dabbed onto this does not adhere particularly well. It will have been lost quickly by washing off engine oil that has dripped onto it.

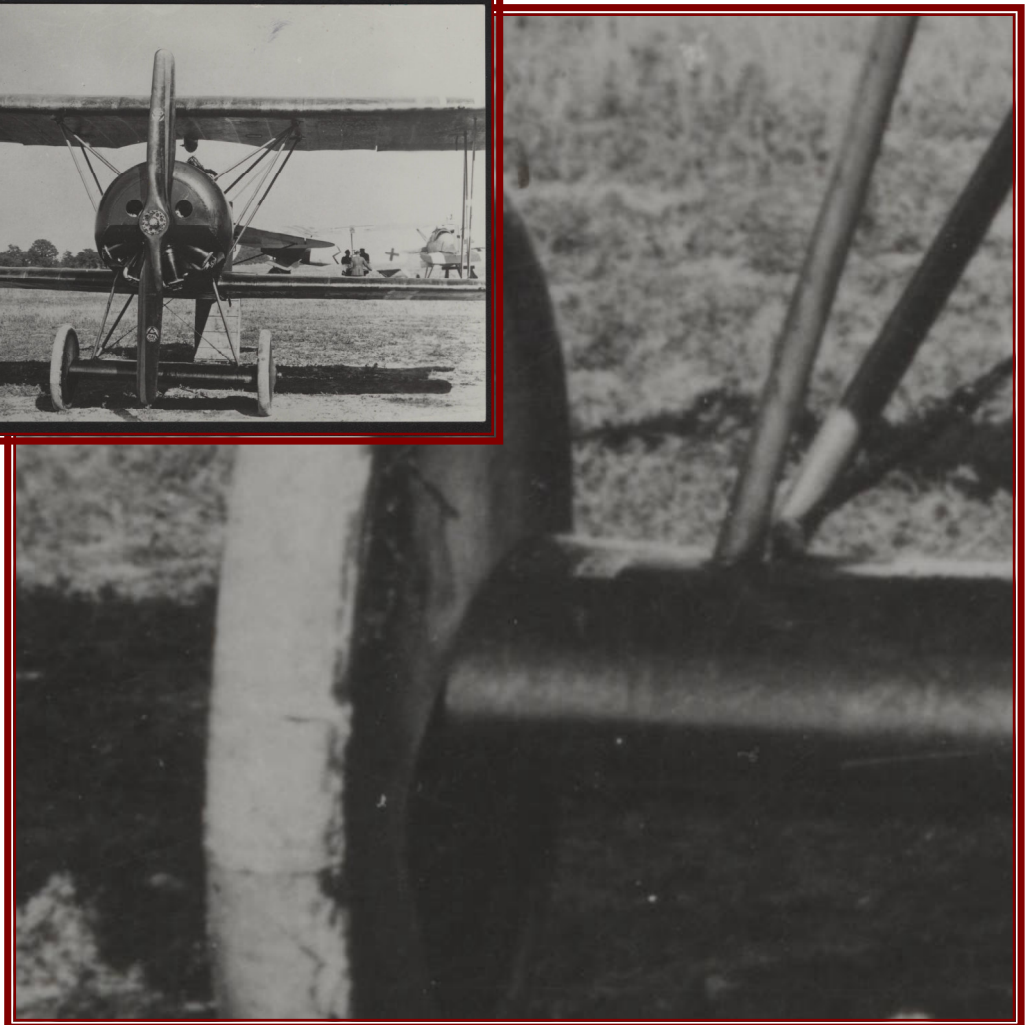
Since license-built machines such as O.A.W. or Albatros Fok. D.VII never have this marking, it was probably a local decision by the railroad in Schwerin.

Nicht auf die Verkleidung treten

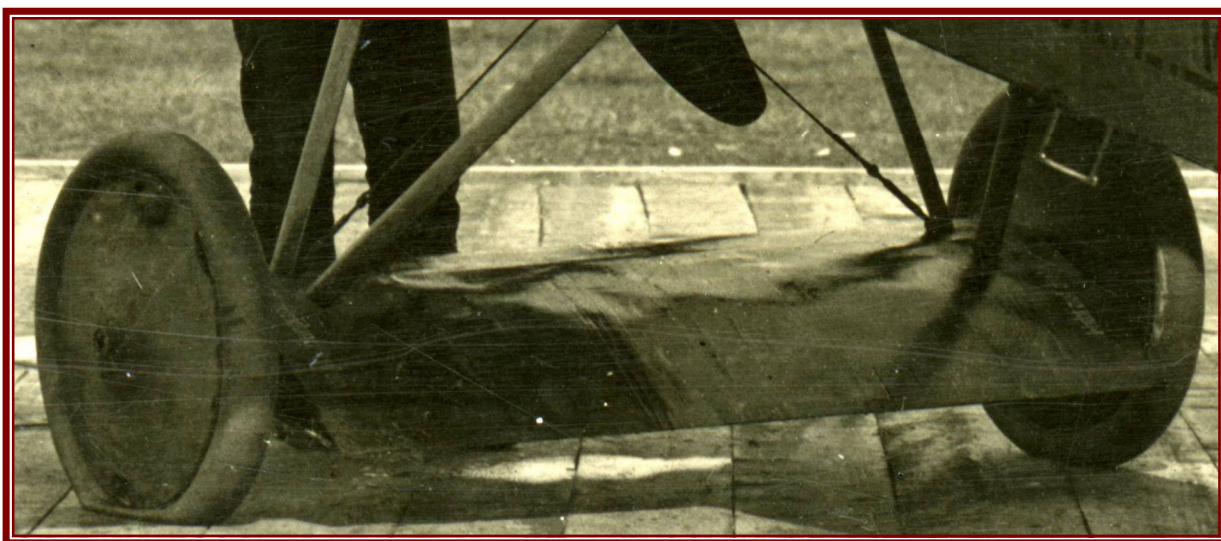




Fokker D.VII



Fokker D.VI



Fokker E.V/D.VIII



"Wing number"

The wing number first appeared in 1917. It is still one of the Fokker myths.

Up to the Fok. D.V, wings were labeled with the serial number of the respective aircraft and in some cases also with the type.

The "wing number" is a separate number independent of the serial number of the respective aircraft.

What is strange about this is that the first aircraft had single-digit numbers. In the case of the triplane, all three wings of the aircraft were labeled with the same number. In the case of the serial number 1916, it was a 5 on all three wings. In the case of the serial number 2000 it was a 9A.

Possibly the basic idea was to document the development status of the aircraft, i.e. the Fokker V.5 (FI/DR1) simply received the wing number 5 for all aircraft. After the wing fractures, later development stages of the wing may have been designated with different wing numbers. It could have looked like this: V.5 -> wing number 5, V.6 -> wing number 6, V.7 -> wing number 7, V.8 -> wing number 8 etc. When the prototype of the V.9 was built, the wings on the triplane were also broken. Factory number 2000, on the other hand, bears wing number 9A. What the A means is completely unknown. It could stand for the upper wing, according to which the middle wing would be 9B and the lower wing 9C. But it could also mean that the wing of the V.9 was given the wing number 9 and the reinforced wing of the Dr.I was designated 9A. It is not known.

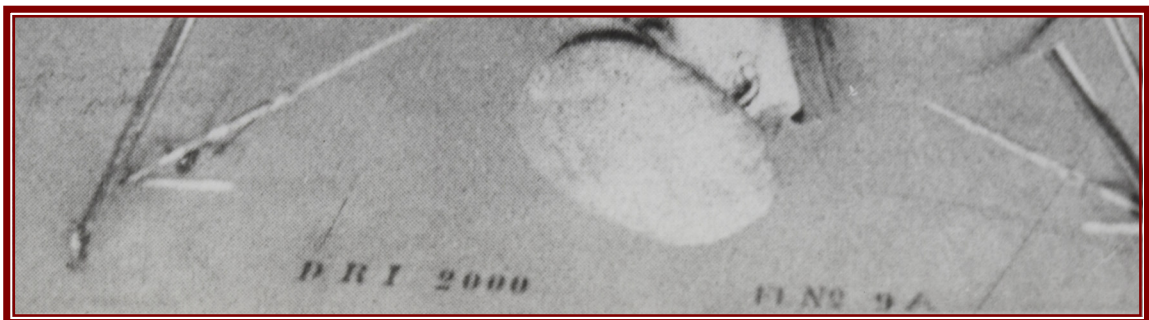
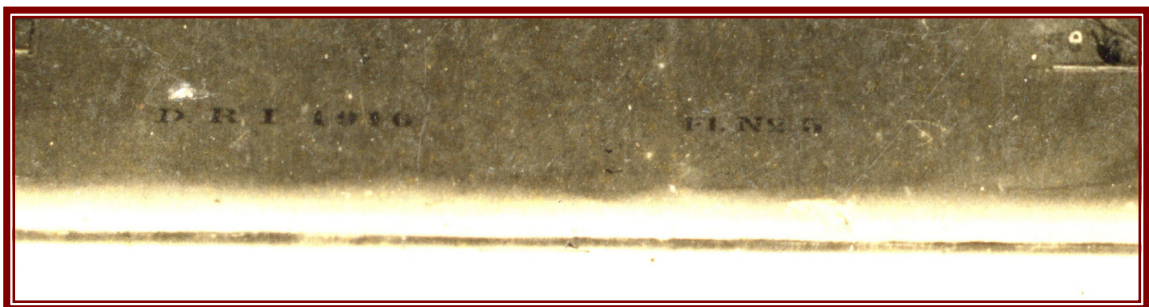
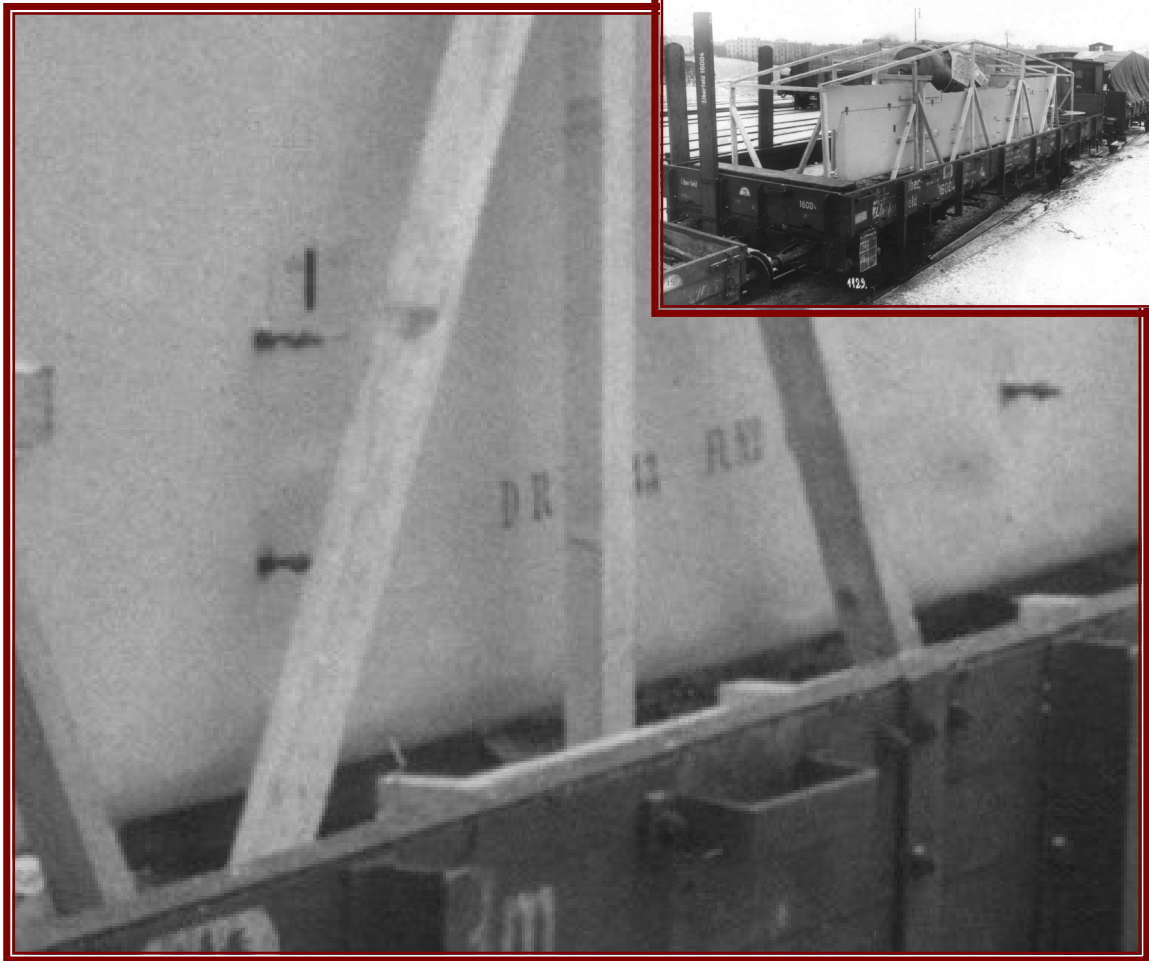
It cannot have been a consecutive number at this time, as serial numbers 1916 and 2000 are 84 aircraft apart

Things get really strange with later aircraft. We know that Fok. E.V Werknummer 2775 had wing number 3878. We can still ponder this until documents emerge that clear it all up. It may well be that, after initial indecision, each wing was given a consecutive number and biplanes were assigned two numbers, one for the upper and one for the lower wing, etc. There were certainly corresponding lists for the aircraft from the beginning of the war or even earlier. Whether these were included here requires further research.

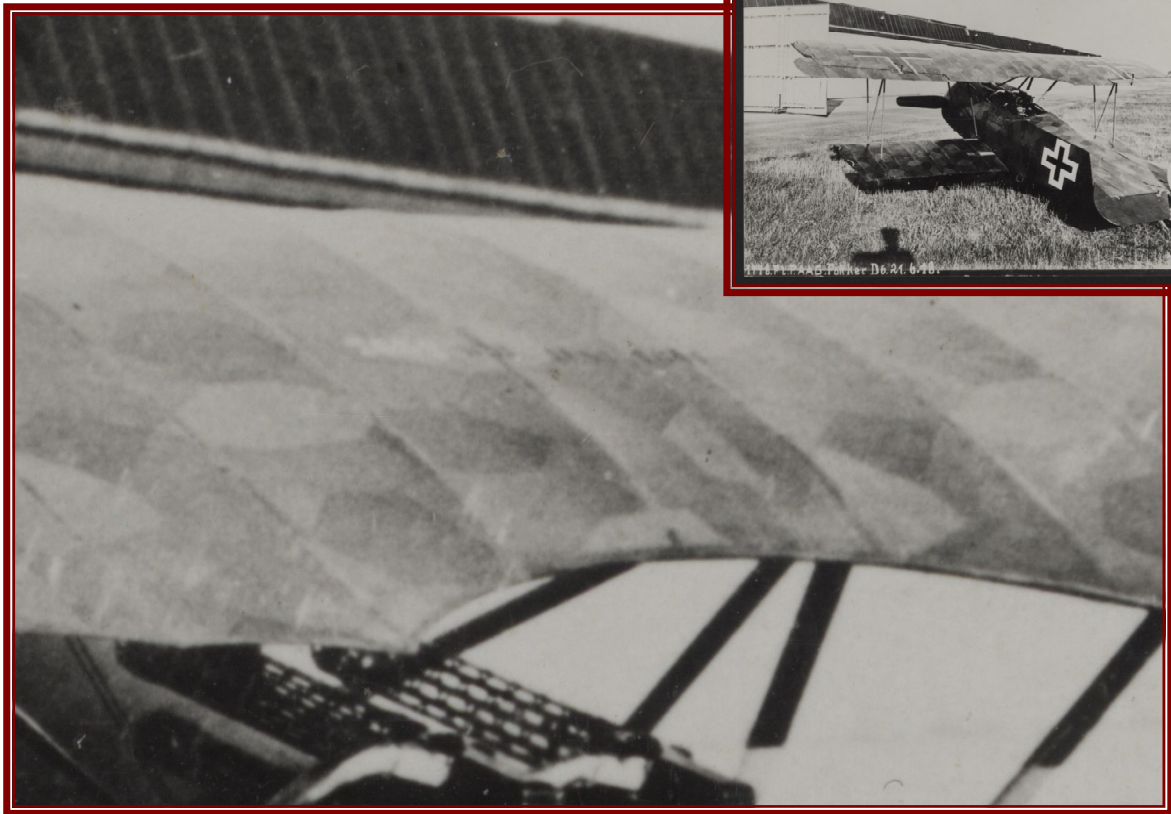
The wing number was applied in both white and black paint. It can be found on the underside of the wings as well as on the upper side. Whether it was applied on both sides is unlikely, it was probably applied as the wing was painted. For the E.V there are photos showing it on the bottom, for the triplane also on the bottom, D.VI only on the top, D.VII also only on the upper side. Often the type designation is also white, while the serial and wing numbers are black at the same time

Prototypes usually have no wing number.

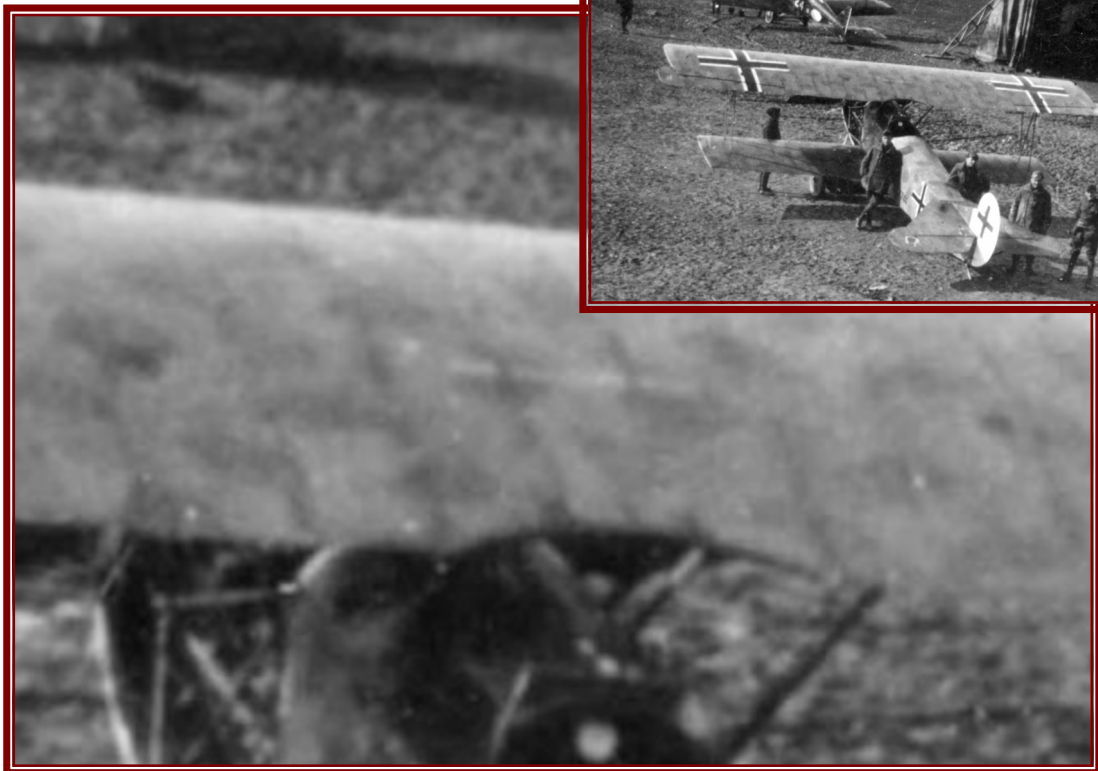
The letters of the surface number are 50 mm high, the serial numbers and surface numbers themselves are 40 mm high digits from our plate no. 1.



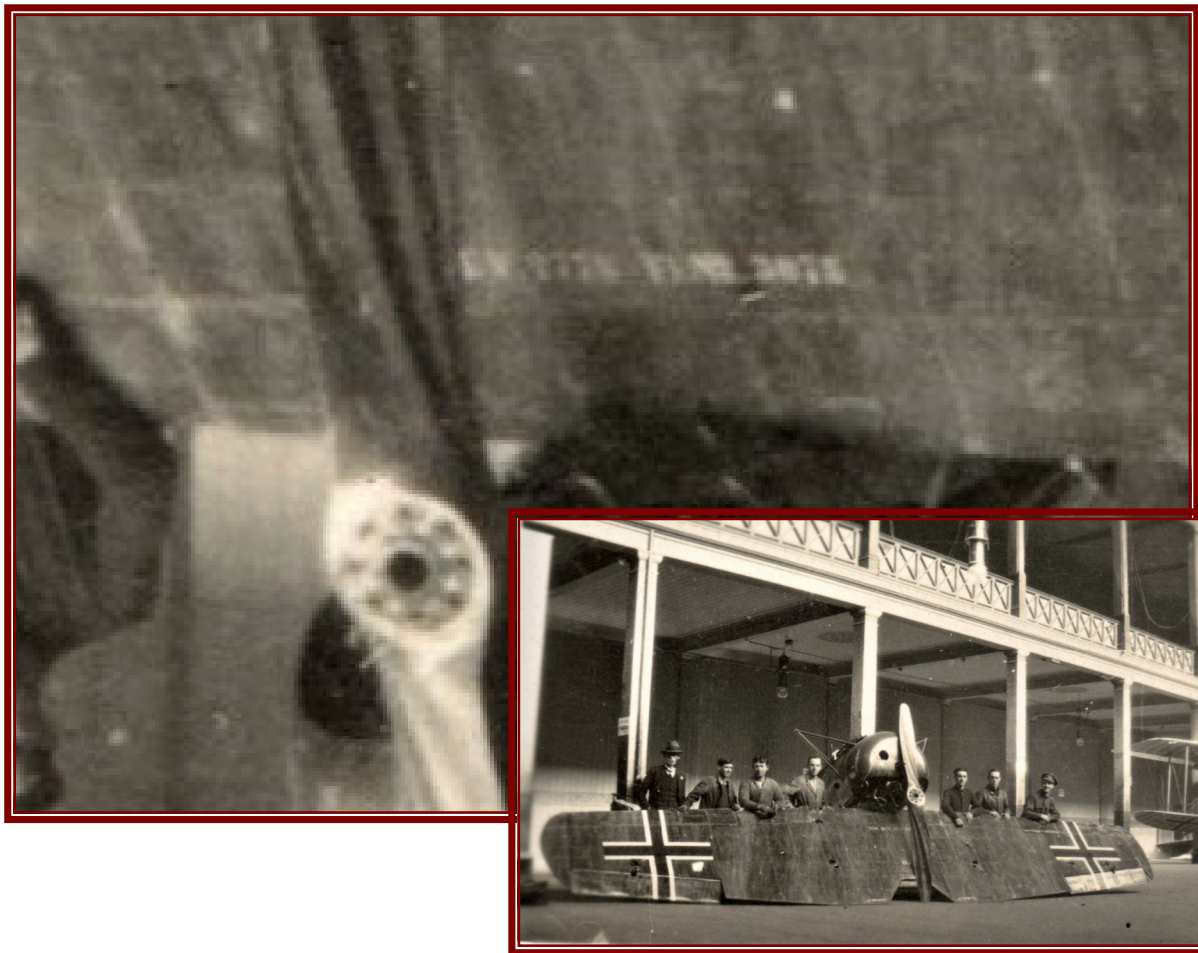
Fokker Dr.I



Fokker D.VI



Fokker D.VII



D. R I 1916

FL N^o 5



As all other plates, plate No. 6 is also available in a file format that allows full size printing.

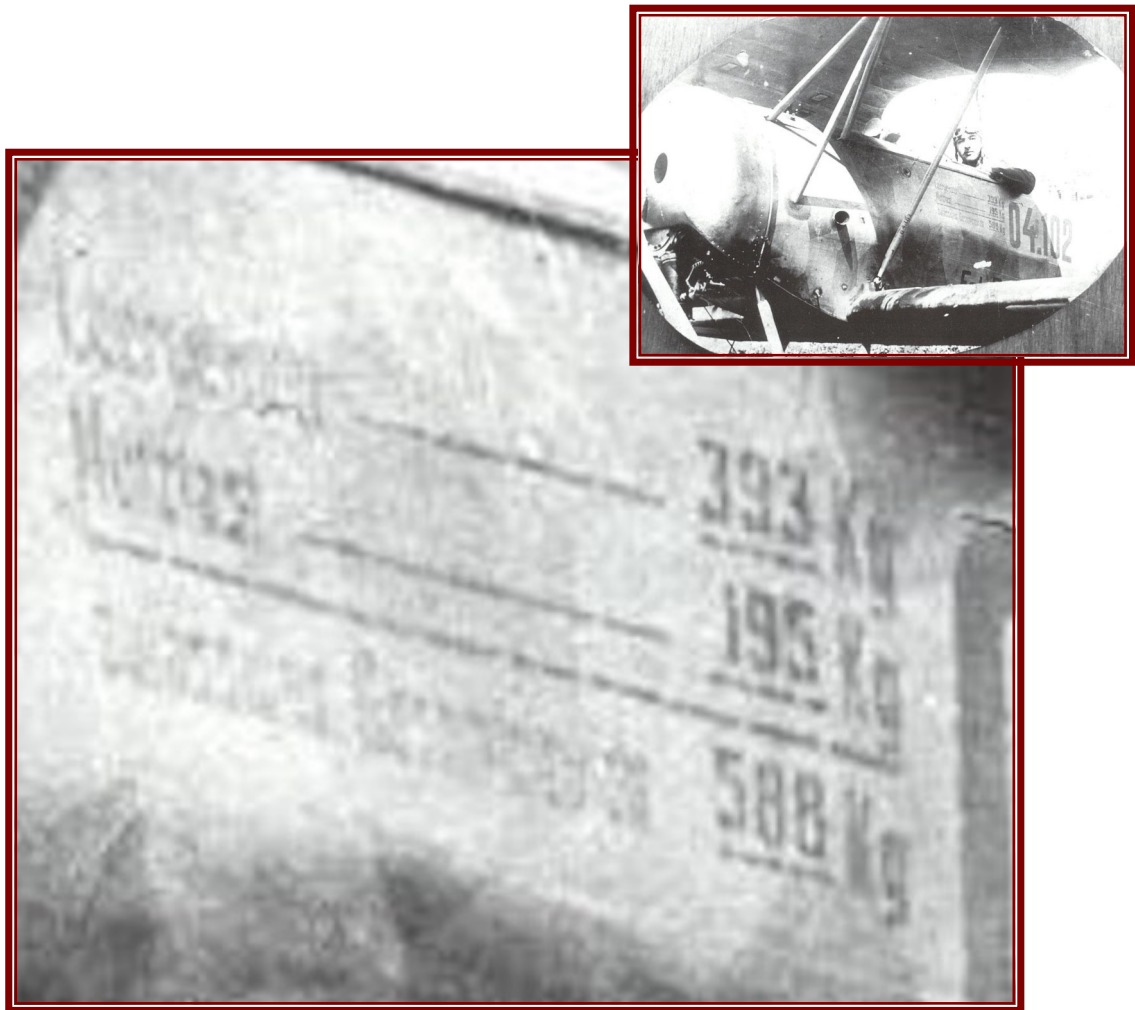
"Weight table"

In the construction and delivery regulations for army aircraft, the requirement to apply loading weights and bracing regulations to the left side of the fuselage appeared from 1917 onwards.

A sample of the type of design was included in the construction regulations in Appendix 7. Fokker designed a slightly different table here.

What is interesting for our stencils is that separate stencils were cut for each aircraft, which covered the entire table. Two basic table forms are known. One was used for the DR.I, D.VI and D.VII types, the other was only used for the E.V/D.VIII.

DRI, however, differs in the writing, where clearly different "z" "g" and also different "G" were used. This supports the assumption that these were not standardized fonts but were cut individually by workers. In general, the font of the DRI weight table appears somewhat more delicate and stylish. This also clearly shows that the weights were not simply used, but that the respective table was an independent template.



Fokker D.VI

Gewichtszahlen: Tab. D.VII

Leergewicht	— — — —	688 Kg
Nutzlast	— — — —	218 Kg
<hr/>		
zulässiges Gesamtgewicht		906 Kg

Diese Ausführung bei D.I, D.VI u. D.VII

Gewichtszahlen: Tab. D.VIII

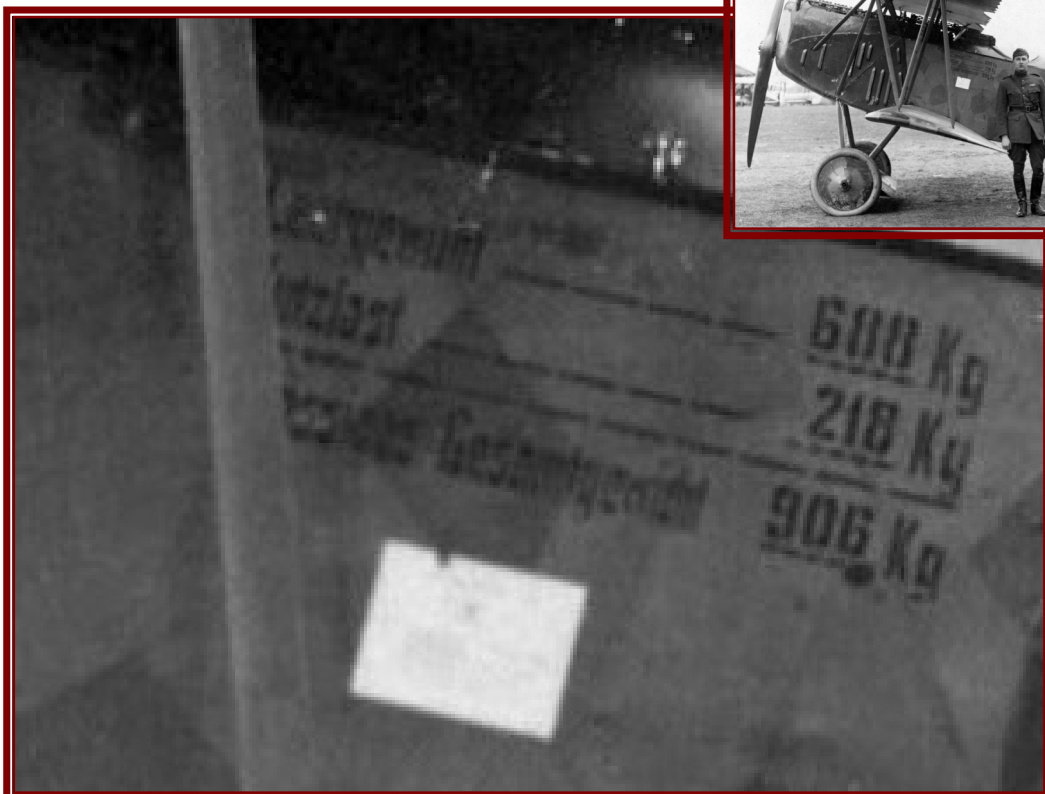
Leergewicht	— —	360 Kg
Nutzlast	— — —	200 Kg
<hr/>		
Vollgewicht	— —	560 Kg

Diese Ausführung nur bei E.V/D.VIII

Tafel Nr. 7



Fokker Dr.I



Fokker D.VII



Fokker D.VIII

Factory designations

Irrespective of the type designations assigned by the military to the aircraft of the individual manufacturers, each aircraft manufacturer naturally had its own system for designating a new aircraft.

Fokker used two different type designations. Before the war, he had a strong interest in selling his aircraft to the military, which he saw as a potentially larger customer than the small market of recreational pilots. As a result, he referred to his aircraft somewhat "pompously" as military types -> M. In other words, M.1 to M.22. Very few of these went into mass production as military aircraft. Only the M.5 as the first monoplane, the M.8 as AI and AII, the M.7 as B.I, the M.10 as B.II, the M.14 as E.I to III, the M.15 as E.IV, the M.17 as D.II, the M.18 as D.I, the M. 19 as D.III, the M.20 as D.IV and the M.22 as D.V.

After the M.22, Fokker pursued a new design series with different design features. From this point on, his aircraft were given the internal designation "V" for experimental aircraft. He built the V.1 in 1916 and ended the series with the V.45 in 1919. Here too, very few went into mass production and are known. V.5 as DRI, V.9/V.13 as D.VI, V.11/V.21 as D.VII, V.26/V.28 as E.V/D.VIII.

In total, he built 22 M-types and 45 V-types from 1913 to 1918. 67 aircraft in total or, to put it another way, an average of 16 new aircraft appeared on his premises every year, all of which had to be kept apart somehow. For this purpose, the internal designation was painted on each new type from the V.5 at the latest. It is seen less frequently on the M-types than later on the V. types.

This designation often stood next to the respective serial number, just as often it stood alone.

According to the construction and delivery regulations, aircraft accepted and purchased by the military were not allowed to bear the company's own type designations.

Fokker M.18 / D.I





Fokker V.36

Fokker V.39



Other

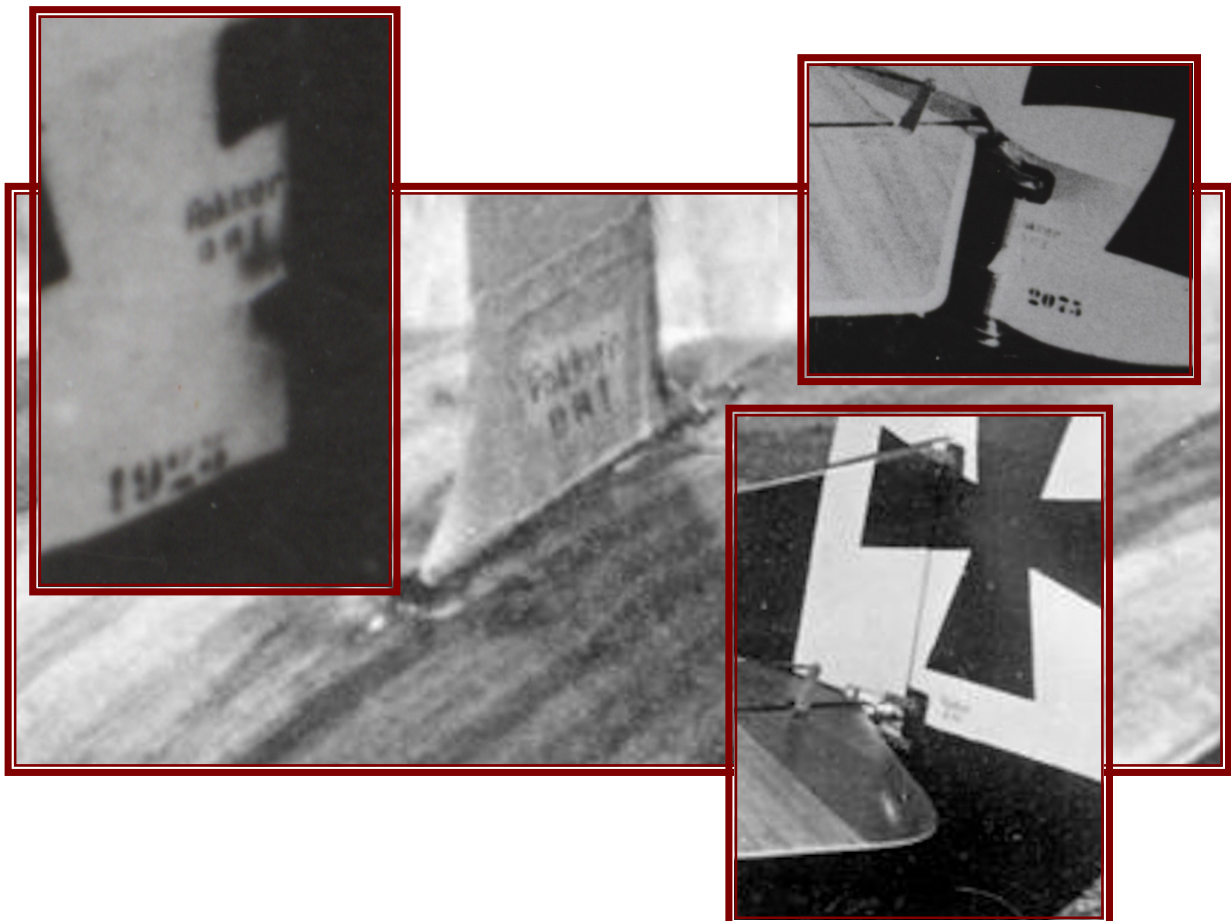
Fokker used a total of three different company logos. The first one is hardly ever found on airplanes

First Fokker logo:



Second logo

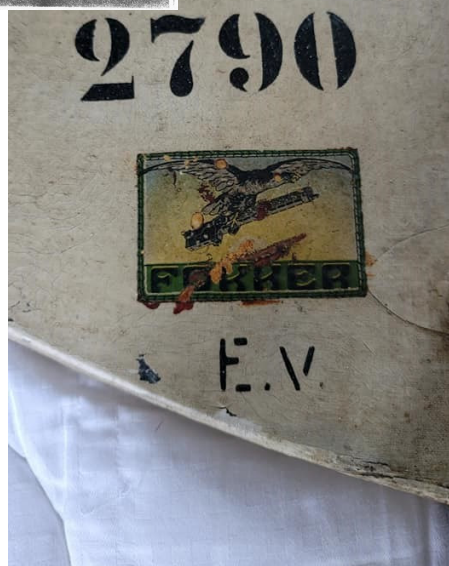
The Fokker F.I is the first aircraft to feature a simplified logo and type designation applied using a dabbing stencil. This logo was demonstrably applied to the rudder, usually only on the right, but rarely can it also be seen on the left. It appears that this dabbed-on logo was also used on other components. A single picture even shows it on a interplane strut of the triplane, whether it was applied here using Photoshop or is actually a real photo, I cannot say. We already know this dabbed-on logo and type designation from the lettering on the inside of the wheels. It was also applied to the rudder of early D.VIIIs.



Fokker D R I

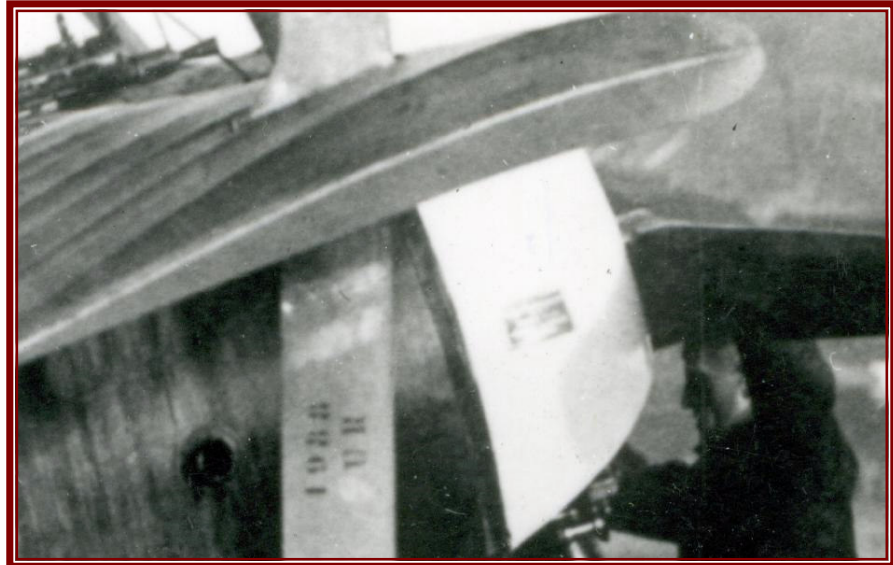
Since the type designation here is never in the same place under the company name, it can be assumed that each type had its own type stencil and these two were applied separately.

From the Fokker D.VII onwards, a new logo appears, which was available as a decal. This can be found on all important components next to the serial number and also has the type designation. There is also a photo of a Fokker D.III with this late logo applied to the wing. This in turn suggests that this aircraft was re-covered and re-marked towards the end of the war.



Strut markings

The Fokker triplane sported strut markings that gave indication to where the according strut goes. This was done by a two letter combination. Either “OL”, “UL” for upper and lower left or “OR” and “UR” for upper and lower right.



“Lift here” and “Only lift here”

The Fokker D.VI and the D.VII feature two markings saying where to lift the wing. Both are accompanied by an arrow and are located at the wing tip where the main wing spars end. However one is a single line with three words saying “Nur hier anheben” (Only lift here), the other one is two lines with the two words placed on top of each other saying “Hier anheben”.

The same inscription was put on the wings of the O.A.W. license built D.VIIs. and we have a piece of this in our collection. This O.A.W. item shows the inscription not being done with a stencil but having been hand written with a 4mm wide brush. We therefore think that the Fokker inscriptions are also not stenciled on but hand written, too. An assumption of course, but until we are proved different we will save the work of creating a stencil for it.

The fact that two versions exist on the D.VI supports the belief that no stencil was made, but that it was hand written. Two painters simply wrote what they were told. The D.VI was only produced by Fokker.



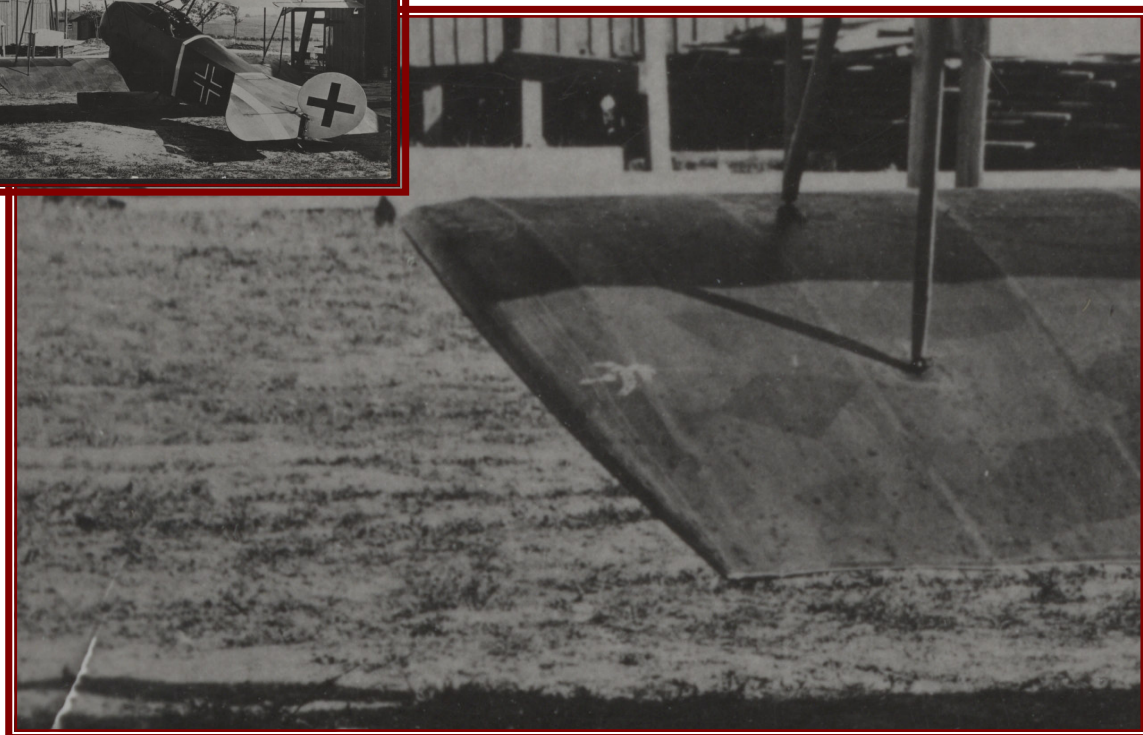
O.A.W. Fokker D.VII artefact.



“Nur hier anheben” (Only lift here)
shown on a Fokker D.VI. On a dark half circular base.



Two line “Hier anheben” (Lift here)
on another Fokker D.VI. Plain on fabric.



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Achim Engels
Heubeundstrasse 1
73116 Wäschenbeuren – Deutschland
www.fokker-museum.de
engels@fokker-team-schorndorf.de

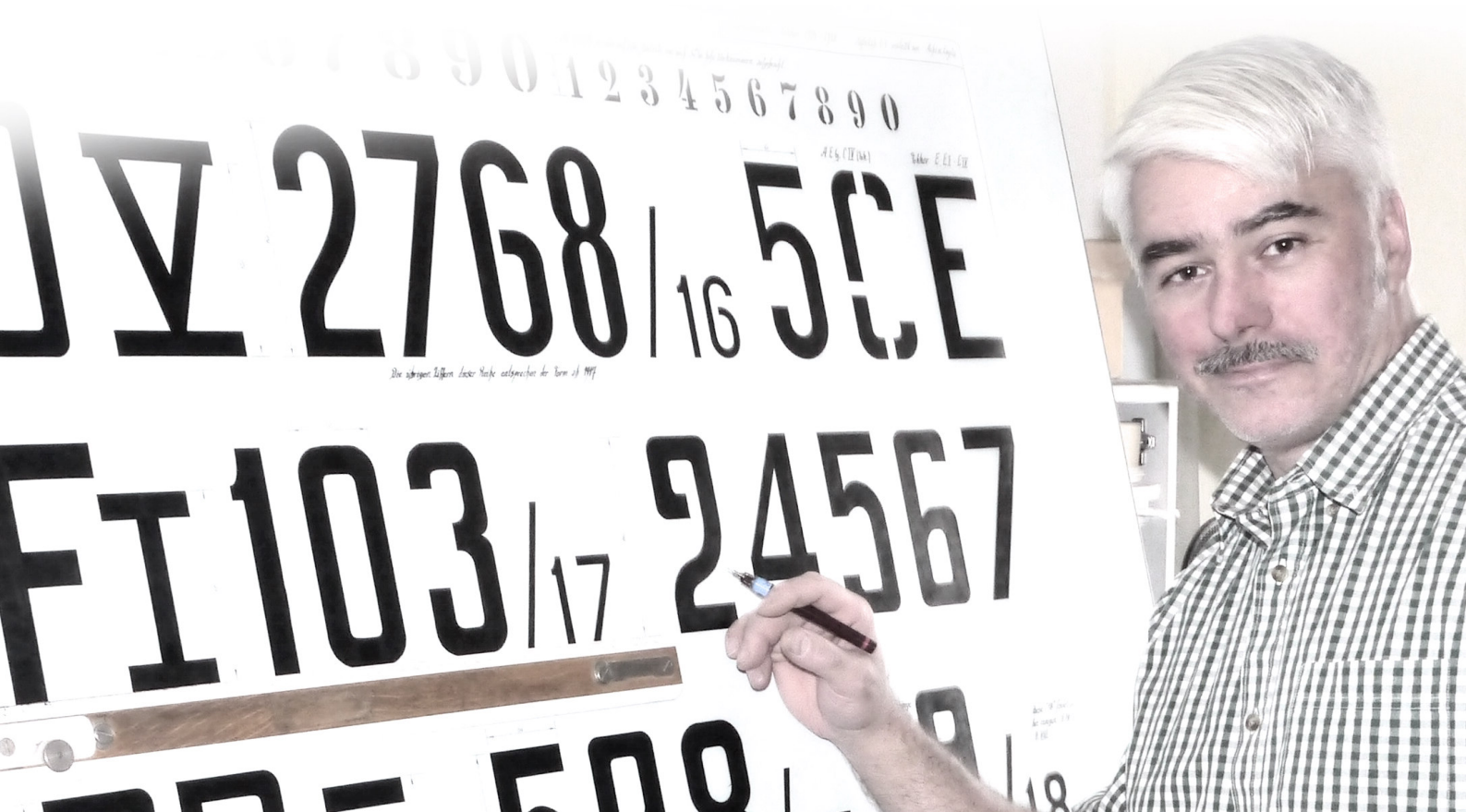
Summary:

At Fokker, the factory lettering was applied using stencils which were used to transfer the lettering to the outer skin of the aircraft in pencil. They were then filled in by hand using a brush. There was no masking or spraying. In rare cases, they were dabbed on. In these cases, it is clearly visible that the bridges were usually painted in afterwards. In a few cases, the bridges were left open. A dark border was created on all the letters as a result of the painting. Of course, this is not visible on stippled markings.

Work numbers were always dabbed on, are irregular and in some cases are also faintly visible.

In all probability, new stencils were cut for individual aircraft at the Fokker factory itself, whereby it was not important whether the dimensions corresponded 100% with previous stencils.

The eight 1/1 plates accompanying this publication are available on request at the above address and will be provided as a full size printable .TIFF file.





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We would prefer donations of materials, though, to help us. We always need aircraft plywood, varnish, tools etc.

Please contact us if you would like to help.