

WINGNUT WINGS



Rumpler C.IV Late

1/32 Scale

The 260hp (Rumpler Flugzeugwerke Type 6A7) Rumpler C.IV appeared in the war torn skies of Europe during February 1917 and immediately proved itself to be very capable in its intended roles of reconnaissance, artillery spotting and light bomber. Rumpler's C.IV was preceded by their successful 1915 two-seat 150/160hp C.I (Type 5A2), which at the time was faster than the legendary single seat Fokker E.III, and the 1916 200hp C.III (Type 6A5). Whether fitted with a camera for reconnaissance, radio for artillery spotting or a load of bombs the C.IV impressed with its great speed, long range and high ceiling which, for a time, allowed it to operate deep in enemy territory without risk of interception. Of course all of this great performance came at a cost and the lightweight fuselage suffered structural fractures under the harsh operating conditions of a front line unit, resulting in the rear fuselage being reinforced with heavier 'struts' and ply panels. Concern was also raised about the heavy aileron controls so the initial stick control column was replaced by a wheel type relatively early in production. Another improvement was removing the sleek propeller spinner in favour of a blunt rounded nose which, contrary to appearances, was more aerodynamically sound and improved performance by 10-15kph. It would appear that many of these improvements were retrofitted to older machines as the opportunity arose.

Records are incomplete and sometimes contradictory so a level of confusion reigns as to the correct designations for the various Rumpler C.IV sub-types. Most Rumpler C.IVs were powered by a 260hp Daimler-Mercedes D.VIa engine and fitted with an internal bomb rack, radio and/or (eventually) various cameras. Airframes fitted with specific equipment or different engines were initially all called 'Rumpler C.IV' although eventually they would be allocated different designations along these lines; Fitted with a 270hp Maybach Mb.IVa it could be designated simply 'Rumpler C.IV' or 'Rumbild Mb' or 'Rumpler C.VII'. With a 300hp Basse & Selve BuS.IVa engine it became the 'Rumpler C.IV (BuS)'. A 260hp D.IVa powered version with 4 ailerons license built by Pfalz was initially called the 'Pfalz C.I' but was later designated the 'Rumpler C.IV (Pfal)'. Aircraft built under license at Bayerische Rumpler Werke were designated 'Rumpler C.IV (Bayru)' and 'Rumpler C.IV (Bayru) BuS' depending on the engine. A trainer version powered by a 180hp Argus As.III engine was the 'Rumpler C.VIII'. Contemporary references to a 'C.V' appear to either mistakenly also refer to the 260hp D.VIa powered Rumpler C.IV or a 270hp Maybach Mb.IVa with internal bomb rack. The C.VII became the C.IX when fitted with additional fuel pannier style tanks for increased range. Interestingly no photo showing a Rumpler marked 'C.V', 'C.VII' or 'C.IX' is known to us. Any history here is of necessity very brief so for a better understanding of this important aircraft we encourage you to seek out the references mentioned below (plus the new Windsock Datafile 149, Rumpler C.IV At War, Ray Rimell 2011).

WWI colour schemes are contentious at the best of times and we have done our best to provide what we consider to be accurate painting information for this model. The various camouflage schemes and personal markings applied to German aircraft of the Great War have attracted more than their fair share of debate over the years and, while we have been as meticulous as we could be, I'm sure some will not find our choices to their liking. Interior fuselage colours are thought to be varnished wood with metal brackets and fittings in black. Tube metal fuselage frames appear to have been painted the same light blue colour as the wing & undercarriage struts. Rumpler C.IV bottom surfaces were usually light blue and top surfaces sprayed with combinations of 2 or 3 colours variously recorded as light green, dark green, brown or mauve. Other colours recorded were white (most likely unpainted bleached linen) bottom surfaces and grey as one of the top surface camouflage colours. A few aircraft received lozenge fabric covering later in the war, the vast majority of which was of the 5 colour variety. Additionally many colourful unit and personal markings were applied, all of which remain amongst the liveliest of topics for modellers to debate.

Richard Alexander 2011

Wingspan:	Length:	Max Weight:	Max Speed:
12.66m (41.53ft)	Early 8.4m (27.55ft) - Late 8.2m (26.9ft)	1630kg (3593lb)	175kph (109mph)
No. manufactured:	Production:	Engine:	Ceiling:
2200 including sub-types (approx)	September 1916 - late 1918	260hp Daimler-Mercedes D.IVa	7000+m (23,000-ft)

Armament:

1x 7.92mm IMG 08 or LMG 08/15 'Spandau', 1x 7.92mm LMG 14 or LMG 14/18 Parabellum, over 50kg of bombs.

References:

Rumpler C.IV Windsock Datafile 35, PM Grosz 1992 - Flight Global Archives (www.flightglobal.com), February 1918 & September 1918 - 1914-18 Aviation Heritage Trust - The Vintage Archive LTD - Colin Owers - Private Collections.

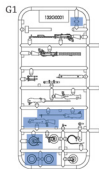
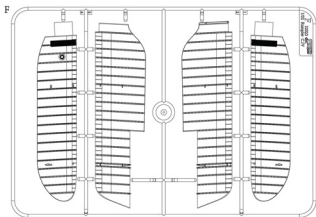
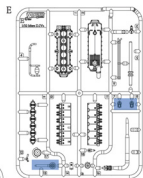
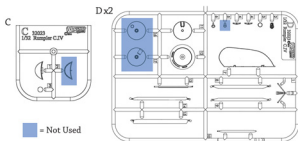
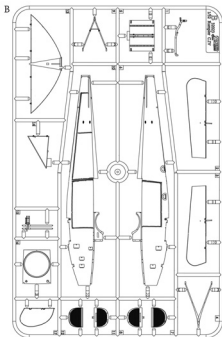
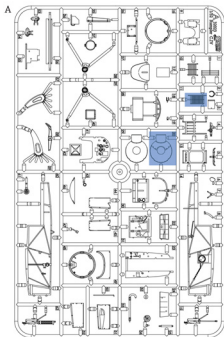
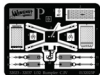
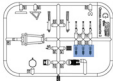


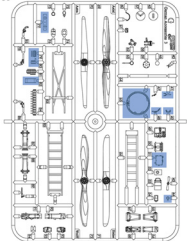
Photo Etch



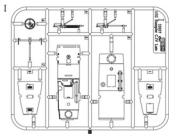
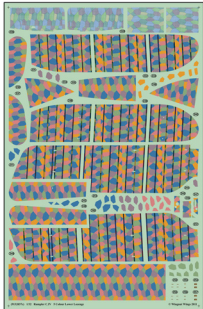
G2 x2



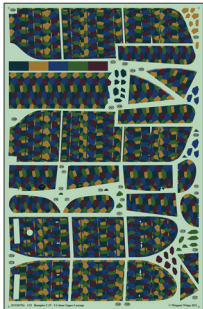
G3



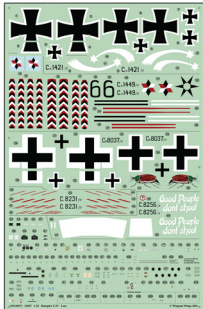
Decal Sheet



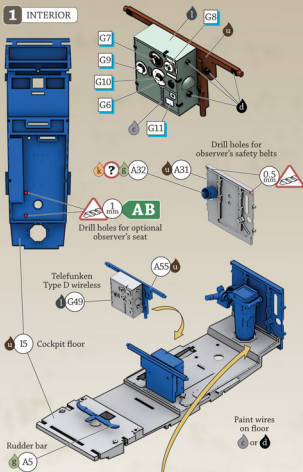
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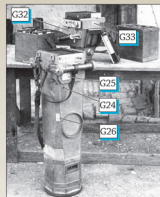
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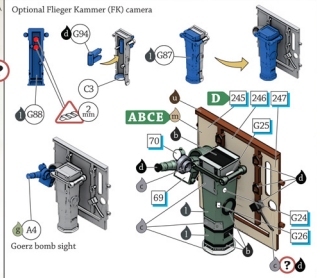
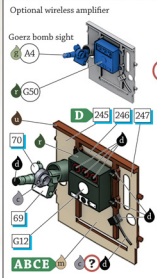
1 INTERIOR

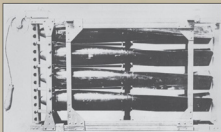


Telefunken Type D wireless (G49) and amplifier (G50) carried by some aircraft.

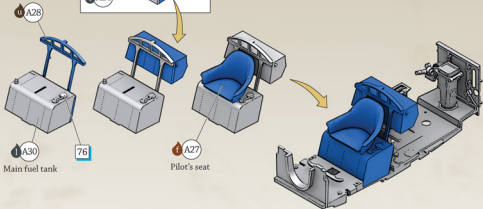
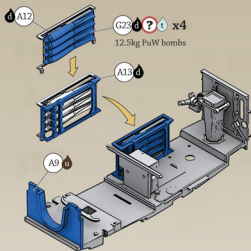


Large Flieger Kammer (FK) camera with a small 25cm hand held camera and boxes of photographic plates on the table behind.





While not a very good print this photograph does show the internal bomb rack for 12.5kp PuW (Pruefanstalt und Werft) bombs as fitted in the Rumpier C.IV.



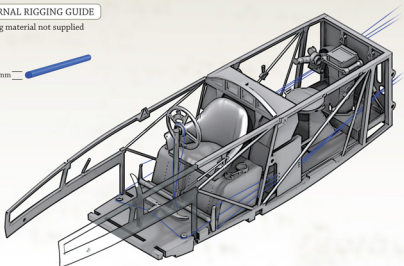
Main fuel tank

Pilot's seat

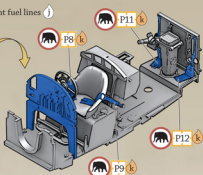
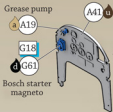
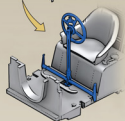
INTERNAL RIGGING GUIDE

Rigging material not supplied

0.15mm

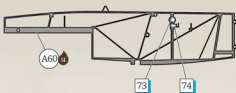


2 INTERIOR continued



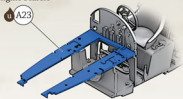
Common type of safety belt found in German two-seater aircraft as displayed in the Deutsches Technikmuseum Berlin.

Paint steel tubes (t) and Morse code transmitter details (d)

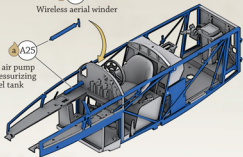


Wireless aerial winder

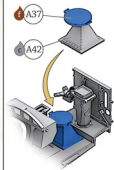
Engine bearers



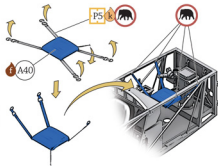
Hand air pump for pressurizing fuel tank



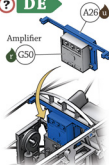
AB Optional observer's seat



CDE Optional observer's seat

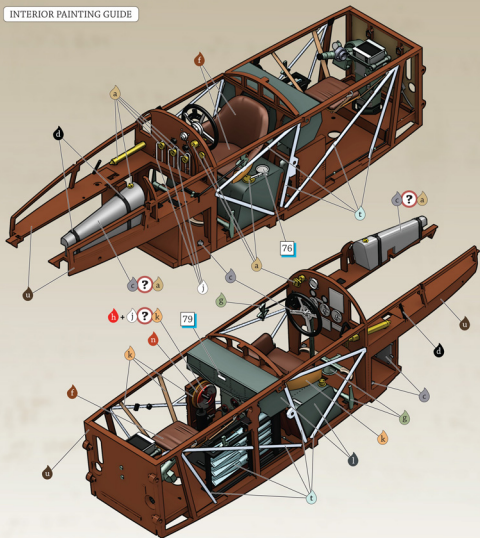


? DE Amplifier

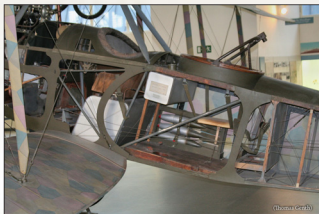


See page 4 for decal and painting guide

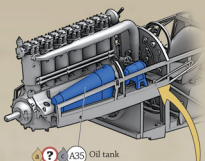
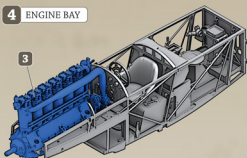
INTERIOR PAINTING GUIDE



This Rumpler C.I/III/IV(?) was restored in the late 1970s and is now on display in the Deutsches Museum von Meisterwerken der Naturwissenschaft und Technik in Munich. While it features many anomalies when compared to a true C.IV (wooden internal bomb rack, lozenge wrapped struts and 180hp Daimler-Mercedes D.IIIa engine for example) it nevertheless provides some useful information for modellers.



4 ENGINE BAY



a ? b c A35 Oil tank

Generator



DE LMG 08/15 'Spandau'



?

ABC IMG 08 'Spandau'



?

High detail



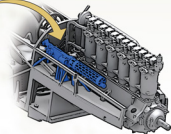
High detail



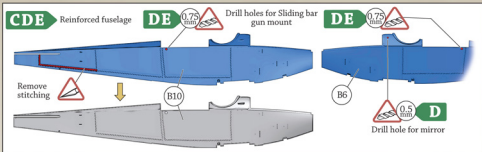
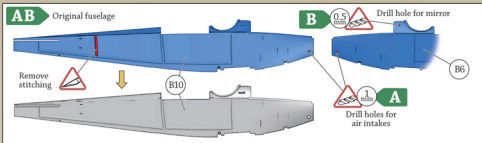
This photo of Ltms Gericke and Pfeifer's FA A 282 (Flieger-Abteilung Artillerie 282) Rumpier C.IV was taken after a crash landing and allows us to see the installation of the IMG 08 'Spandau'.



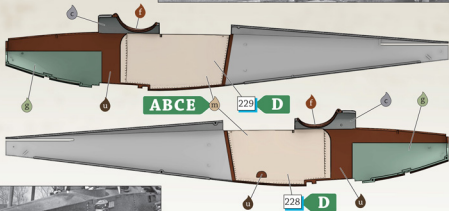
This photo of the severely damaged Rumpier C.IV 8068/17 reveals many otherwise hidden internal details such as the IMG 08 'Spandau' mount P10 and bottom of the 260hp Daimler-Mercedes D.IV.a engine.



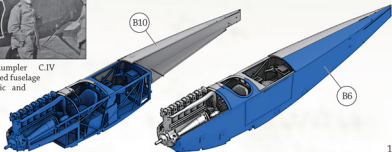
5 FUSELAGE PREPARATION



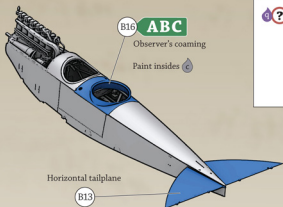
> Fuselage detail from Rumpler C.IV 1459/17 showing the early style of fuselage with fabric and stitching running all the way to the rear of the fuselage.



This unidentified Rumpler C.IV features the ply reinforced fuselage with abbreviated fabric and stitching.

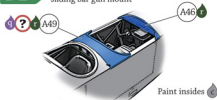


6 FUSELAGE continued and TAILPLANE

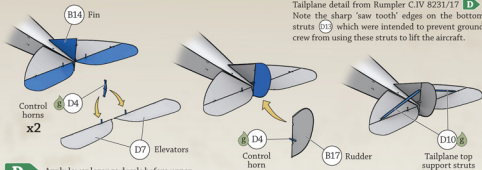


D Apply lower lozenge decals before upper.

DE Observer's optional coaming for sliding bar gun mount

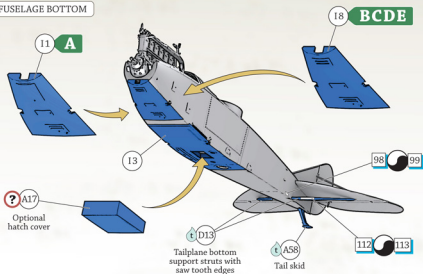


Tailplane detail from Rumpler C.IV 8231/17 **D**. Note the sharp 'saw tooth' edges on the bottom struts **D13** which were intended to prevent ground crew from using these struts to lift the aircraft.



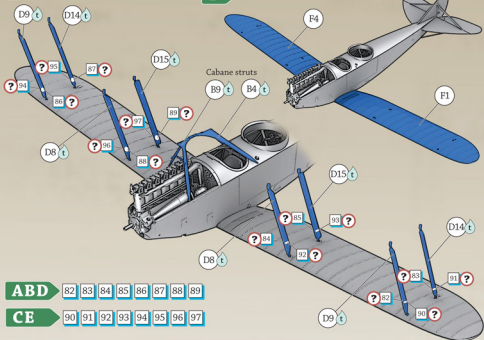
D Apply lower lozenge decals before upper.

7 FUSELAGE BOTTOM



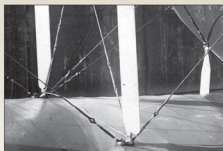
8 BOTTOM WINGS AND STRUTS

D Apply lower lozenge decals before upper.

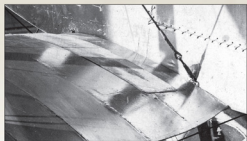


ABD 82 83 84 85 86 87 88 89

CE 90 91 92 93 94 95 96 97



Wing strut rigging detail from early production Rumpler C.IV 6758/16. The struts and many metal components were finished in light blue (t).



Wing walk detail from Rumpler C.IV 6758/16.

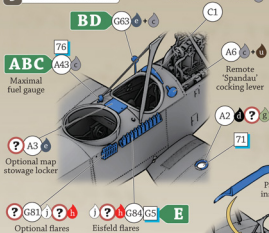


Strut and rigging detail from Lt'n Duphorn's crashed Rumpler C.IV 7620/17 (possibly from FA A 283 at Omencourt France). Note the wing attachment instructions [58] doped to the side of the fuselage, late style wing strut identification marks [90], [91], [92] & [93] and barograph [G54] + [G14] suspended between the struts. Note that rigging turnbuckles are only present where they attach to the bottom wing.

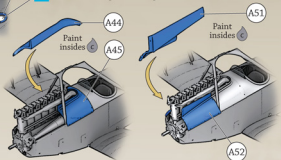


An early form of strut identification mark [86] & [87] can be seen in this close up of Rumpler C.IV 1421/17.

9 FUSELAGE DETAILS



Engine cowl panel detail from Rumpler C.IV 6758/16. Note the fine wire which was often threaded through the cowl turn button fasteners to prevent them working loose in flight.



Ltn Seele and Riffler pose atop their FA A 274 Rumpler C.IV showing various cockpit coaming details such as the maximal fuel gauge **A43** + **76**.

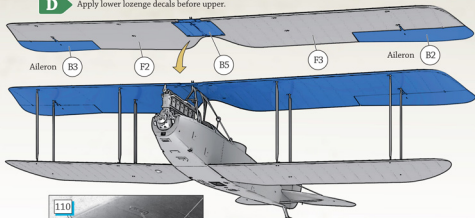
^ We recommend leaving these off to display your engine detail.

> Eisfeld flares **G84** + **G5** and flare pistol **G96** from **E**.



10 TOP WINGS ANDAILERONS

D Apply lower lozenge decals before upper.



< Cabane strut and wing detail showing position of decals **110**, **114** and **119**.

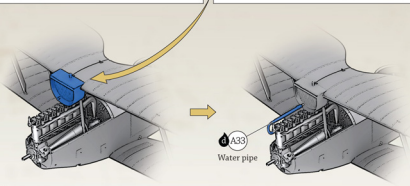
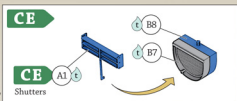
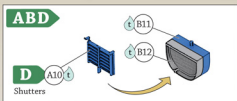
11 WINDHOFF RADIATORS AND NOSE DETAILS



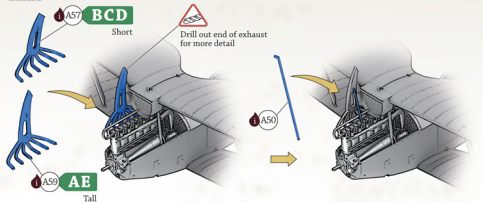
Windhoff radiator (B11 + B12) detail without any shutters. Radiators appear to have been painted the same light blue colour as the struts, although the top surface was often camouflaged.



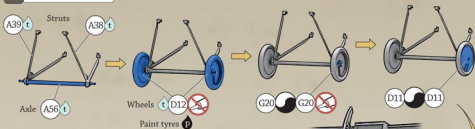
Windhoff radiator (B7 + B8) detail with shutter (A1). Note the exhaust support bracket (A50).



Exhausts



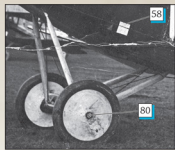
12 UNDERCARRIAGE



< Undercarriage detail from Rumpler C.IV 6758/16 showing one form of component stenciling [100](#).

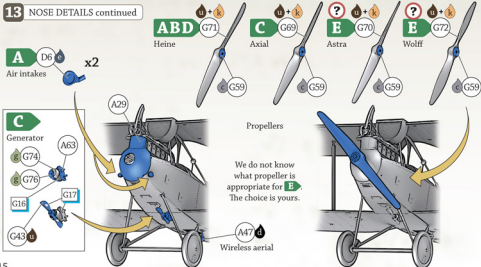


Undercarriage detail from a Rumpler C.IV (Bayru) thought to be 8913/17.



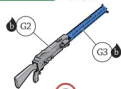
Undercarriage detail from Rumpler C.IV 1454/17.

13 NOSE DETAILS continued



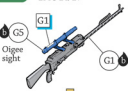
14 OBSERVER'S ARMAMENT

ABDE Parabellum LMG 14

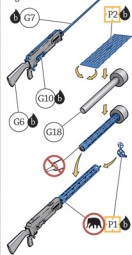


An unidentified airman test fires a Parabellum LMG 14/17. Note the empty belt, Ogeeg optical sight **G5** and cocking handle details.

C Parabellum LMG 14/17



High detail

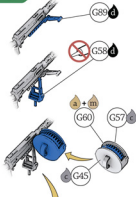


Parabellum LMG 14 with 200 round belt magazine.

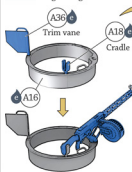
ABDE



C



AB Rumpier style gun ring



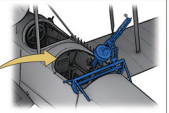
Rumpier style gun ring **A16** from C.IV 1421/17. Note the gun butt cradle **A36** and trim vane **A18** used to assist rotating the ring in flight.

C LVG style gun ring



DE

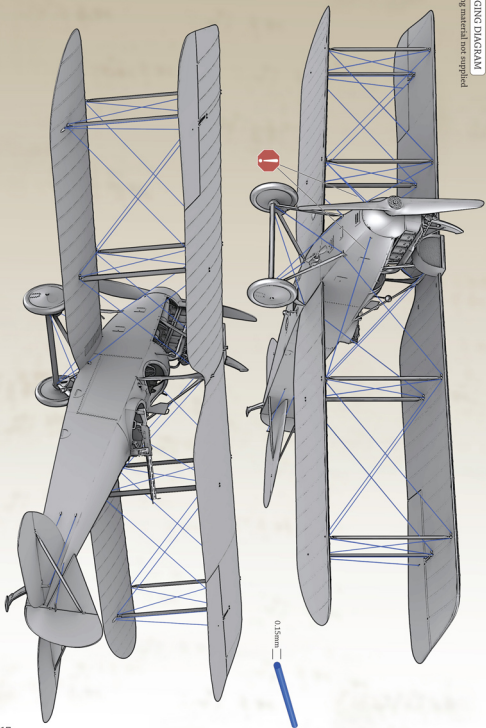
'Sliding bar' gun mount

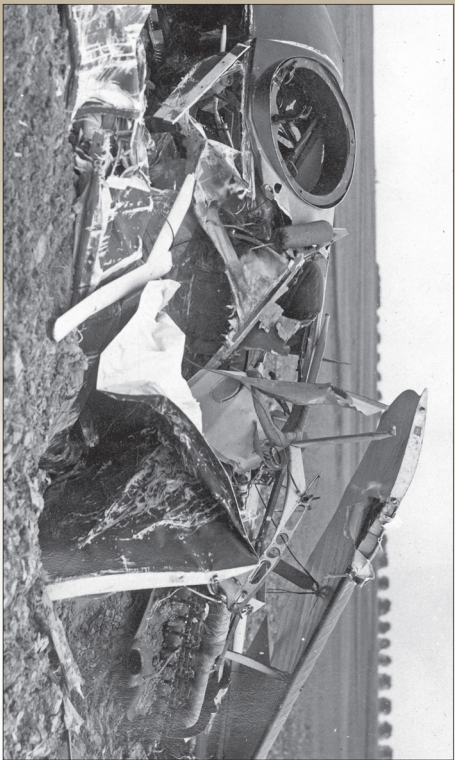


Specialized 'sliding bar' style of gun mount **B15** + **D1** detail from **D**. Although appearing rather antiquated this mount is normally only seen on late production Rumpier C.IVs. The exact purpose for this is not known although it would have reduced weight and increased the space in the observer/commander's cockpit allowing additional equipment and stores to be carried.

RIGGING DIAGRAM

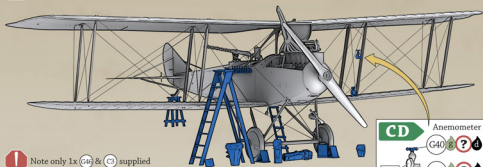
Rigging material not supplied





The sad wreckage of Rumpier C IV 8415/16 allows us to see many otherwise hidden details. Note the light blue metal tubes of the fuselage frame visible in the observer's cockpit, Rumpier gun ring, cabane struts (84, 8) (10) and what appears to be additional seat back padding for the pilot. The top surface of the cabane struts has received a coat of camouflage paint.

15 OPTIONAL ACCESSORIES



! Note only 1x G46 & C3 supplied

CD Anemometer

G40 ? d
G73 ? d
G13

FK Stab camera

G67 G55
C3 ? G46 d

25cm camera hand held

G93 G92

Photographic plates for cameras

G24 u+d

Barograph

G14 G54 k

FK.III camera

G90 G91
C3 ? G46 d

First aid kit

G52 G15

Homing pigeon box

G53

Wheel chocks

x2 G28 u

Toy bear

G62 k

Step ladder

G85 G83 k ? d

Ladder

G66 k ? d

Flare pistols

G78 u+d
G86 u+d
G95 u+d

Eisfeld flare pistol with flare

FK.II camera

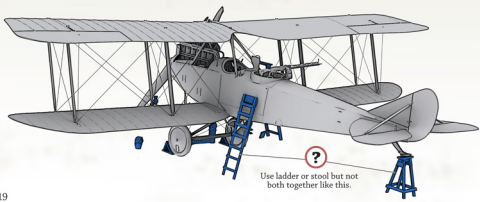
G56 G68
C3 ? G46 d

Stool

G30 k ? d
G29 k ? d

Oxygen

x2 G26 G31 G27 k



? Use ladder or stool but not both together like this.



^ Lts Gunther Wolff & Joseph 'Sep' Hennen of FA A 209 display some of the reconnaissance equipment carried in their 270hp Maybach powered Rumpler C.VII 6477/17.



25cm hand held camera (G00) + (G05) as carried by Gunther Wolff.

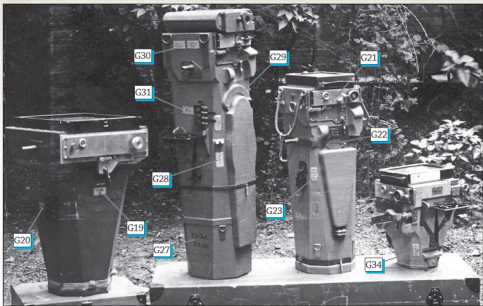


Alternative Parabellum mount and magazine fixed to an LVG style gun ring.

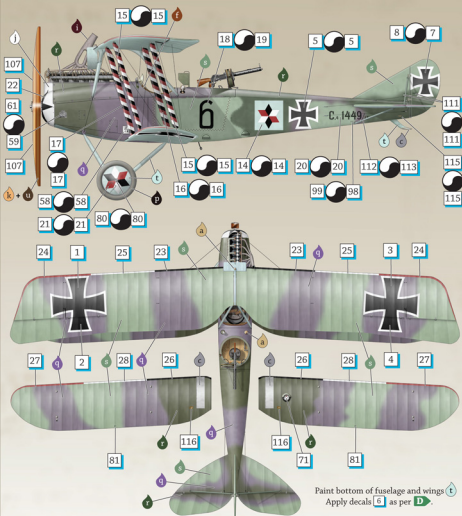


Photographic plates (G24).

∨ Selection of Flieger Kammern which could be carried by Rumpler C.IVs, from left to right; FK Stab (G55) + (G60), FK.III (G90) + (G91), FK.II (G56) + (G68) & 25cm hand held (G00) + (G05).



B Rumpler C.IV 1449/17, 'Black 6', mid to late 1917

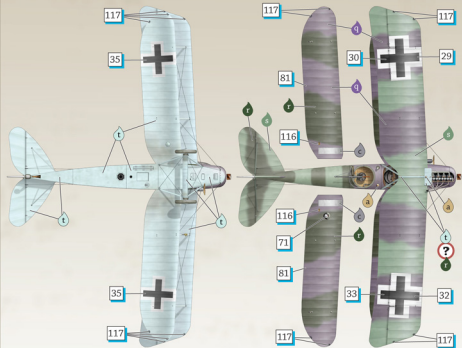
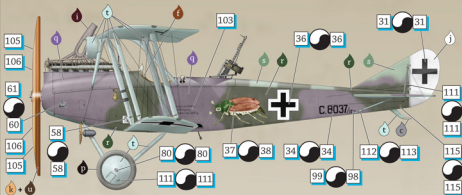


Paint bottom of fuselage and wings **t**
Apply decals **6** as per **D**.

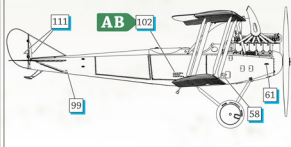
The spectacularly marked Rumpler C.IV 1449/17 has come to grief and serves as the backdrop for several photographs. The colours of the Imperial German flag have been painted on the leading edges of the wings, around the struts and as diamond patterns on the fuselage and wheels. A black 6 pointed star is painted on the nose behind the propeller. (see page 26). Unfortunately no personnel or unit identities are known to us. Perhaps you can help? See also page 26.



C Rumpler C.IV 8037/17, 'Scarab', mid to late 1918

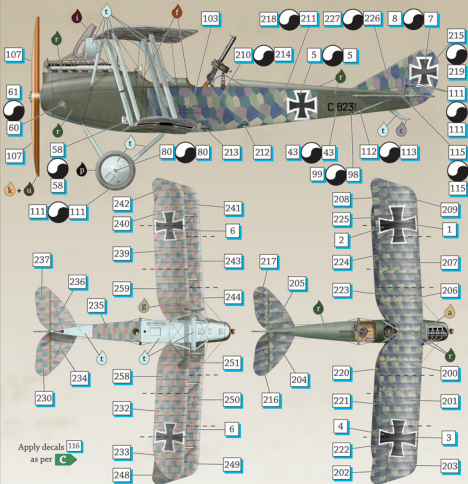


ABCDE Common decals

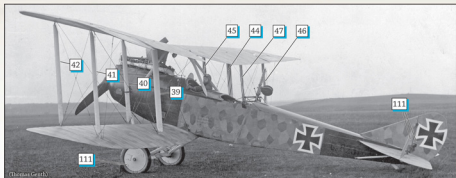


Another spectacularly marked Rumpler C.IV from another unidentified unit. A highly detailed Scarab beetle has been painted onto the fuselage of Rumpler C.IV 8037/17, perhaps indicating something about the background, nickname or hobby of the pilot or observer/commander. The original eisenkreuz markings have undergone their post March-April 1918 conversion to straight armed balkenkreuz (the additional clear film on decals **36** will help achieve this look). Other details to note include the Oige sight on the observer's Parabellum LMG 14/17, generator attached to the front left undercarriage strut and anemometer fixed to the port inner front strut.

D Rumpler C.IV 8231/17, late 1917 to early 1918

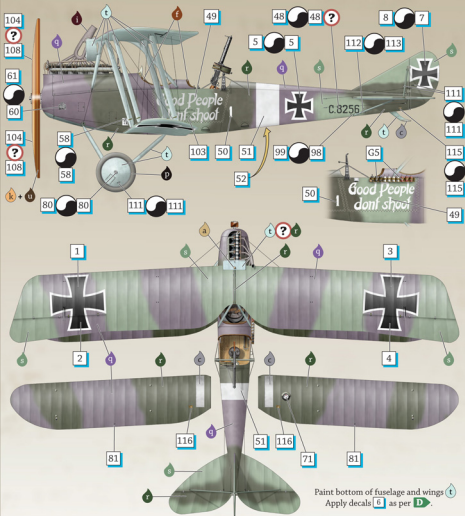


Apply decals 116
as per **C**



Rumpler C.IV 8231/17 is from the same July 1917 production order as **C** (numbers 7950/17 - 8349/17) but is one of the few airframes covered with 'lozenge' fabric, in this case the 5 colour type which appears quite faded. It is also fitted with a specialized 'sliding bar' style of gun mount which would at first glance appear to be a step backwards in design from the more common types of gun ring carried by Rumpler C.IVs. The vertical lines on the insides of the struts appear to be some sort of warning to the observer so he doesn't shoot them. Note the anemometer fixed to the port front inner strut and altimeter (D3) + 75 suspended from the cabane struts.

E Rumpeler C.IV, 'Good People', late 1917 to early 1918



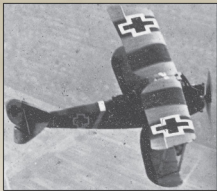
The phrase 'Good People Don't Shoot' has been seen on several German aircraft in both German and, as seen here, English. Judging from the observer's fully armed Parabellum LMG 14 it is not this (unidentified) crew who the phrase is intended for. Note the 'sliding bar' Parabellum mount, rack of Eisfeld flares (98), Eisfeld flare pistol (99) and Parabellum LMG 14 machine gun. The end of the empty ammo belt is clipped to the side of the gun to stop it flailing around in the airstream. Unfortunately the true identity of this 1917 production Rumpler C.IV is not known but all indications point to it being a late model 260hp Daimler-Mercedes D.IVa powered aircraft; the fuselage has the ply reinforced rear section with abbreviated fabric stitching and the remote 'Spandau' cocking lever (A6) is faintly visible (these were often removed, along with the 'Spandau' to improve performance on Maybach and BuS powered aircraft). We have included a spurious (but plausible) serial number (48) for you to use if you wish, or you can cut it up, rearrange and combine with numbers from the other decals to create any known 1917 production Rumpler C.IV serial number.





Another view of Rumpler C.IV 1449/17 **B** showing radiator detail, propeller laminations and 6 pointed star on nose behind propeller.

This rare in flight photo allows us to see the different styles of camouflage application to the top wings and tailplane. Note the post March-April 1918 balkenkreuz markings and white(?) fuselage band.



3-D Modelling by Bryan Wall

Bryan Wall is a product designer, specialising in computer aided design and 3D modelling. He has 9 years experience as a designer for consultancies in the UK and New Zealand, and has designed, engineered and modelled a wide variety of products, from exercise bikes, barcode scanners and razors, to windscreen removal tools and automated toolsets.

Bryan is particularly interested in the ingenuity of the design and engineering evident in these planes, and the comparison of the concurrent development between the warring nations. He is also fascinated with the history conveyed through the surviving reference photographs and drawings. "God is in the details" as they say in the design industry and Bryan feels that the attention to detail and accuracy of the Wingnut Wings kits is what makes them so special.

Aside from design, Bryan is interested in a wide range of sports and music, he is a guitar player and is currently teaching himself the piano, and he also brews his own beer.



Project Co-ordinator, Richard Alexander

A native of Wellington New Zealand, Richard Alexander has a long term interest in military history, race cars & local drivers from motor sports golden era of the '60's. Other interests include mountain biking, scotch and cigars.

An accomplished modeller Richard's models have twice been awarded Best Overall in Show at IPMS(NZ) National Conventions and earned him the inaugural TamiyaCon(NZ) Master Modeller award (along with the associated trip to Japan) in 2001. Many of his works are in private collections around the world, though he no longer accepts commissions.

Richard has been in the model and hobby industry since 1991 and brings with him a keen eye for detail and a passion for ensuring our models are enjoyable to build. So if there is anything you don't like about this model, you can blame him.

If you do have comments, requests or suggestions, Richard is contactable at richard@wingnutwings.com



Profile Art by Ronny Bar

Ronny Bar developed a keen interest in airplanes from an early age, living close at the El Palomar Air Force Base in Buenos Aires. He first flew in the back seat of a T-34 Mentor trainer at the age of ten, and was soon drawing airplanes and building models: Spitfires and Messerschmitt first... Camels and Fokkers later.

He became a successful bass player with a career lasting over 35 years in several Rock bands, recording ten albums (one of them being a National hit selling more than 100,000 copies) and performing countless concerts, TV shows and tours all over Argentina.

Now retired from the R'n'R scene, his interest returned to his early passion: Aviation Artwork. Visiting the WW1 aircraft collection at Hendon focused his already growing interest for that historic period. His artwork is regularly appearing in journals and publications like Windsock Worldwide, Windsock Datafiles, Cross & Cockade and Over the Front.

Visit Ronny's website at: www.ronnybarprofiles.com



Box Art by Steve Anderson

Steve Anderson is an avid historian of military aviation, with a special interest in the many beautiful biplanes and triplanes of World War I. The aircraft and battles of famous World War I aces such as Baron Manfred von Richthofen (better known as the "Red Baron"), James McCudden, Raoul Lufbery, Ernst Udet, Werner Voss, and other pioneers of dogfighting are among Steve's favorite subjects.

An Artist Fellow of the American Society of Aviation Artists, Steve creates works that reflect scrupulous attention to historically accurate detail, from the colorful markings on the fuselages to the time of day of an actual battle.

Visit Steve's website at: www.anderson-art.com



32037	1/32 Rumpler C.IV Late	Qty
0132023A	A parts	1
0132023B	B parts	1
0132023C	C parts	1
0132023D	D parts	2
132E0003	E parts Merc D.IVa engine	1
0132023F	F parts	1
132G0001	G1 parts	1
132G0002	G2 parts	2
132G0003	G3 parts	1
0132037I	I Parts	1
0132023P	Photo-etched metal parts	1
7132037	Instructions	1
9132037	Decals	1
9132037b	Lozenge decals upper	1
9132037c	Lozenge decals lower	1

If you have any damaged or missing parts please contact help@wingnutwings.com for assistance.



32012 - 1/32 RE.8 'Harry Tate'



32006 - 1/32 Pfalz D.IIIa



32004 - 1/32 Bristol F.2b Fighter

Also available from
www.wingnutwings.com

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