

WINGNUT WINGS



Junkers D.1

1/32 Scale

The revolutionary Junkers D.1 all metal monoplane fighter entered service in late 1918 and can trace its lineage back to Professor Hugo Junkers' 1912 patent for a thick cantilever wing design intended to increase lift and reduce drag. This cantilever wing design was utilized on Junkers' experimental 0.1-0.2mm ferro-magnetic steel skinned two seat J.1 monoplane completed in November 1915. Successful flight testing was rewarded with an order for 6 single seat J.2 fighters in January 1916. Skinned in sheet steel like the J.1, the J.2 proved to be too heavy for use as a front line fighter. Thereafter Junkers was able to use corrugated duralumin (an aluminium alloy) for his private venture J.4 in the middle of 1916 which was abandoned when work began on the armour plated two-seat ground attack J.4 biplane in late 1916. The J.4 successfully went into production in 1917 with the military designation Junkers J.1. The success of the J.4/J.1 led to a contract to develop 3 new monoplane fighter designs in December 1916. The J.5 had the engine positioned behind the pilot and didn't make it off the drawing board. The J.6 had a parasol wing and some work was carried out during 1918 although it was never completed. In late 1917 work began on the single seat J.7 and two seat J.8 (the J.8 prototype was developed into the J.10 which was put into production in March 1918 as the Junkers CL1). The J.7 was constructed from duralumin tubes and frames covered with 0.35mm corrugated duralumin sheets fixed with aluminium rivets. Wing spar joints etc had steel collars fixed with iron rivets. When the 160hp Daimler-Mercedes D.III powered J.7 first flew in September 1917 it featured unusual pivoting wing tips instead of ailerons but these were replaced with more conventional items in time for additional testing in mid October. Numerous improvements were made over the following months before it was demonstrated at the first fighter competition in January 1918. The speed and climb performance were excellent but it was felt that it lacked maneuverability and downward visibility. Perhaps understandably the revolutionary design was viewed with suspicion by many pilots more accustomed to traditionally constructed biplanes (a suspicion not really overcome well into the 1930s).

The qualified success of the J.7 prototype encouraged Junkers to develop a production version known as the J.9 which featured numerous changes, the most obvious of which was a lengthened fuselage and elimination of the "head rest" fairing. Pre-production prototype J.9/I took to the air on 12 May 1918 and performed well with its 160hp Daimler-Mercedes D.III engine although this was replaced with a 200hp D.IIIa in time for the 2nd fighter competition in June 1918. The 2nd pre-production prototype J.9/II was powered by an experimental 195hp Benz Bz.IIIb V8 engine which never performed reliably enough to take part in the 2nd fighter competition. A 3rd J.9/III(?) was modified with a shortened fuselage and was fully camouflaged and designated "Junk D.1" when photographed on 8 July 1918. A factory photograph taken on 8 August 1918 shows at least 5 completed J.9 airframes including J.9/I and J.9/II along with another 2 similarly unpainted long fuselage airframes, the modified shortened J.9/III(?) "Junk D.1" and another short fuselage aircraft still under construction. Following type testing of long fuselage J.9/I (now painted in camouflage and designated "Junk.D.1. 5180/18") and J.9/II in early September 1918 it appears that production was hurriedly converted to the short fuselage configuration. When at least 4 Junkers D.1 were dispatched to the front on 2 October 1918 they all appeared to have short fuselages and no image showing a long fuselage D.1 in service is known to us. How much action the Junkers D.1 saw before the Armistice is unconfirmed but they were used to great effect during the fighting between German Freikorps and Bolshevik (and other) forces in the Baltic during 1919. Ultimately just 40 Junkers D.1 were completed by Junkers & Co (Jko) and Junkers-Fokker (Jfa) with the majority being delivered after the Armistice. Any history of this important aircraft here is of necessity very brief so we encourage you to seek out any, or all, of the references listed below, but we do so with the caution that a reasonable amount of confusion exists about this aircraft.

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 and, while we have been as meticulous as we could be, I'm sure some will not find our choices to their liking. An Air Ministry report on an abandoned Junkers D.1 (now believed to be 5183/18) found at Evere, Belgium after the Armistice notes that "The wings are painted a pale green, with irregular patches of light mauve on top, and white underneath". Close examination of photographic evidence shows that these colours were not sprayed on but applied by brush or sponges. The fuselage had been overpainted "...a chocolate-brown colour, except underneath, where a white pigment has been applied". It also noted that "pale green" could be seen where the brown paint had come off. Interior duralumin surfaces and frames were left unpainted on the prototype J.7 and may have remained unpainted on the first few aircraft but a photo on page 12 of Datafile 33 shows the interior painted in a reasonably dark colour that was probably grey-green. Interior steel brackets and collars riveted with iron rivets appear to have been painted black or possibly with red-brown primer unless overpainted with grey-green. Junkers aircraft serving with Kampfgeschwader Sachsenberg in the Baltic were overpainted in the middle of 1919 with an irregularly applied translucent dull camouflage colour thought to be a grey-green.

Richard Alexander 2018

Wingspan (D.1):	Length (Short):	Max Weight:	Max Speed:
9.0m (28.5ft)	6.7m (22ft)	835kg (1841 lb)	176kph (109 mph)
No. Manufactured:	Production:	Engine:	
40	May 1918 to February 1919	180hp & 200hp Daimler-Mercedes D.IIIa or D.IIIaU	
Ceiling:	Armament:		
Approx 6000m (19685ft)	2x 7.92mm LMG 08/15 "Spandau" Machine Guns		

References:

Junkers D.I Windsock Datafile 33, PM Grosz 1992 - Junkers Monoplanes at War Windsock Datafile 131, Harry Woodmann 2008
 Flight Global Archives, April 1920 (www.flightglobal.com) - Junkers D.I (J.9), Seweryn M Fleischer, Karaya 2010
 Air Enthusiast Twenty-Five, August-November 1984 - The Junkers Monoplanes, Profile Publications, Hugh W Cowin 1967
 1914-18 Aviation Heritage Trust - The Vintage Aviator LTD - Private Collections

Junkers D.1

1/32 Scale

Warning: Choking hazard. Keep small parts and plastic bags away from children. Use glue and paint in a well ventilated area. Always wear protective eyewear when cutting and a protective mask when painting, gluing and sanding. Do not breathe dust from polyurethane resin parts (if included). Beware of sharp edges on metal parts.

Assembly: **Read all the instructions carefully before starting assembly.** Use glue intended for plastic models. Assemble metal and resin parts (if included) using Cyanoacrylate (CA) or epoxy glue. Before assembly select a marking option and note optional parts required in instructions.

Rigging: If installing rigging please drill out all location holes with a 0.5mm drill bit to a depth of at least 1mm. To make rigging as simple as possible we recommend using stretchy elastic type material like 'EZ Line' etc and not trying to replicate any turnbuckles.

Painting: Only use paints **designed and suitable** for plastic model kitsets.

Decals: Cut out each decal as required. Soak in warm water for 15 seconds. Slide off backing paper onto **gloss painted surface of model (not just clear coated plastic)**. For large decals it is helpful to apply a drop of water to the area they are being applied to. This will make it easier to maneuver them into the correct position.

Hints & Tips: Please visit our website for additional photos, hints and tips to assist you in getting the best result from your Wingnut Wings model.

1 Construction Step



Choose



Attention



Remove

A1 Part Number



Do Not Cement



Option



Drill

5 Decal

P1 Photo Etch Part



Cement For Metal



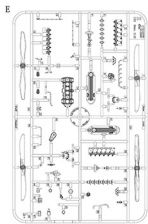
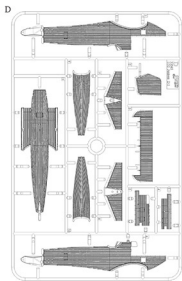
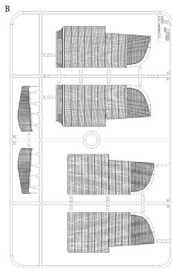
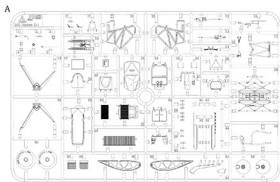
Other Side



Paint Colour

All colours	Tamiya	Humbrol	Federal Standard
a Brass	X31	54	
b Gun Metal	X10	27004	
c Aluminium - matt	XF16	27001	
d Black - matt	XF1	33	
e Chocolate Brown - matt	XF10(x5) + XF1(x2)	251	30045
f Leather - semi gloss	XF52	62	30219
g Rubber - matt	XF69	66	35042
h Light Grey Green - matt	XF76	240	24424
i Aluminium - bright	X11	27002	
j Rust - matt	XF9	113	20061
k White - matt	XF2	34	
l Light Wood* - semi gloss	XF59	93	33245
m Dark Wood* - semi gloss	XF68	98	30111
n Linen - matt	XF60	83	33440
o Light Blue - matt	XF2(x10) + XF18(x1)	34(x10) + 96(x1)	25550
p Grey Green - matt	XF22	92	34159
q Dark Field Grey - matt	XF65	116	30111
r Pale Green - matt	XF71	78	34227
s Light Mauve - matt	X16(x1) + XF52(x1) + XF2(x1)	68(x1) + 29(x1) + 34(x1)	-
t Off White - matt	XF2(x10) + XF55(x1)	34(x10) + 148(x1)	37886
u Camouflage Overspray - matt	XF65(x1) + XF86(x1)	116(x1) + 49(x1)	
v Dull Brass - matt	X12(x5) + XF1(x2)	16(x5) + 33(x2)	
w Red - matt	XF7	60	

Note: Apply clear varnish to achieve the desired gloss or semi-gloss finish. *See our website hints and tips for painting wood.



Decals

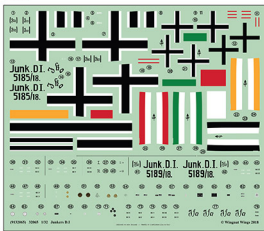
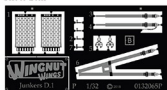
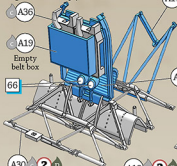


Photo Etch

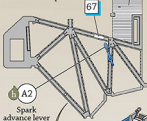


1 COCKPIT INTERIOR

Magazines and empty belt chutes



Main fuel tank and centre section framework & spars



Engine bearer frame

A17

Firewall and fuel gauges

A24

Fuselage framework

A12

Grease pump

A7

Spark advance lever

A2

Hand air pump for pressurizing fuel tanks

A1

4 point safety harness

P3

Fabric covered frame

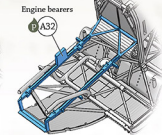
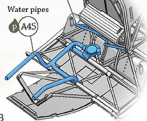
A23

Engine bearers

A32

Water pipes

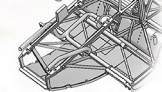
A45



Gravity fuel tank & empty shell chutes

Paint chutes

A29



Altimeter

A3

Control column

A15

Rudder pedals

A14

Instrument board

A37

Instrument board

A37

Instrument board

A37

Instrument board

A37

Instrument board

A37

Instrument board

A37

Instrument board

A37

Instrument board

A37

Remove for display option

ii

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ii

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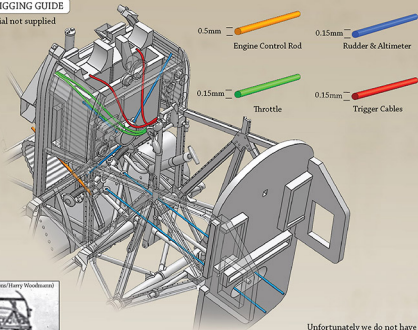
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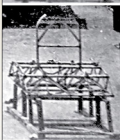
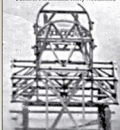
ii

INTERIOR RIGGING GUIDE

Rigging material not supplied



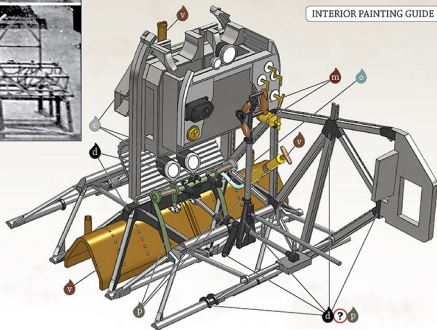
(Albatross Publications/Harry Woodman)



< Junkers D1 cockpit frames under construction at the Junkers factory on 8 August 1918. The rounded frame behind the pilot was covered with fabric on aircraft in service.

Unfortunately we do not have any information about the compass type or location.

INTERIOR PAINTING GUIDE



180hp DAIMLER-MERCEDES D.IIIa engine prior to restoration

Although (E22) and magnetos (E19) & (E20) have been removed there are many useful details visible in these photos.



Port side of the engine, the red-brown pipe carries the plug leads from the magnetos to the spark plugs.



Large air pump (E29) characteristic of the 180hp Daimler Mercedes D.IIIa.



Starboard side of the engine. Note the position of the data plate.



Rear port view showing the empty magneto mounts, water pipe and spark plug details.



Rear starboard view.

2 DAIMLER-MERCEDES 180hp D.IIIa & 200hp D.IIIau ENGINE

D.IIIa air pump

E29 ACE

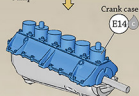
? BD



E31 Sump

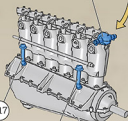
D.IIIa air pump

BD ? E37



Crank case

E14



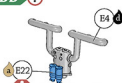
E17

E18

ACE

BD ?

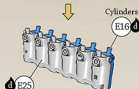
D.IIIa common intake manifold



E4

E22

! Float bowl assembly Note orientation



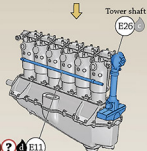
Cylinders

E16



Rocker boxes

E27

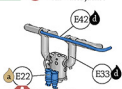


Tower shaft

E26

BD ?

D.IIIau intake manifold with water jacket

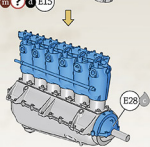


E42

E22

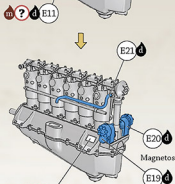
E33

! Float bowl assembly Note orientation



E15

E28



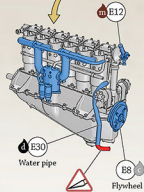
E11

E21

E20

E19

Magnets



E12

E30

E8

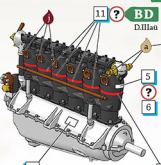
Water pipe

Remove

Flywheel

BD ? ACE

D.IIIa



11

? BD

D.IIIau

5

? ?

6

59

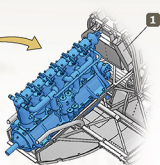
19

? BD

D.IIIau

11 ? BD

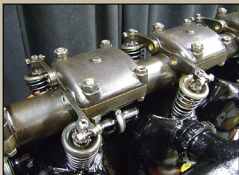
D.IIIau



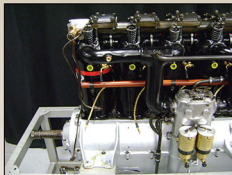
1



Detail of the horizontal air pump associated with the 200hp engine.



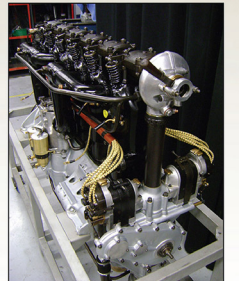
Overhead camshaft and valve gear rocker details.



Water jacketed intake manifold and carburetor intake detail. A mount for the generator (94) can be seen at right but the actual generator was very rarely installed in fighter aircraft unless used to power an electrically heated flight suit or wireless transmitter.

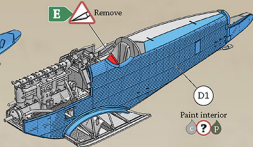
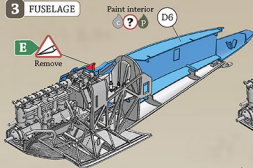


The red bands 11 & 19 are not always clearly visible in archive photos but should be applied around every cylinder to indicate that they are over compressed.



Rear of the engine showing magneto and generator belt cover details.

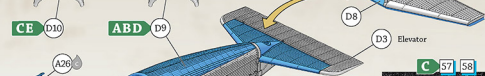
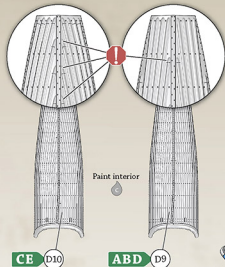
3 FUSELAGE



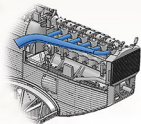
> Tail skid detail from 5183/18(?) seen on page 18.



> Tailplane detail from Junkers D.1 5185/18 **A**. Note the wide circular opening for the rudder post.

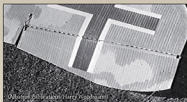
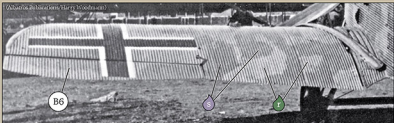


> Radiator detail from Junkers D.1 **C**. Note the thermometer **58** and data plates **57**.



4 WINGS

Port wing detail from Junkers D1 5185/18 **A**. Note the aileron control horn and that the fairing for the wing joint has been removed. Close examination of this and other photographs show that the camouflage colours were not sprayed on.

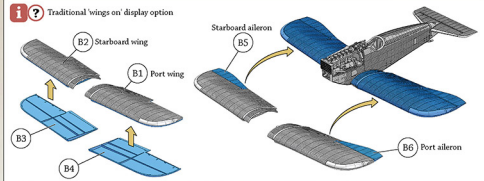


< Starboard aileron detail from the shortened J 9/III(?) 'Junk D I' seen on page 20. Note where the aileron control rod enters the wing and the lightening holes in the false spar.

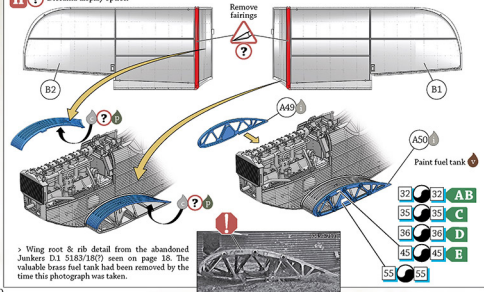


> Starboard wing root detail from Junkers D1 **C**. Note the very pale wing joint lower fairings which are clearly painted independently from the rest of the wing.

i ? Traditional 'wings on' display option



ii ? Diorama display option



5 FUSELAGE DETAILS & ARMAMENT

(0459-217)



^ Rollover hoop detail from 5183/18(?) seen on page 18.



A40 < Early large foot step from 5183/18(?) seen on page 18.



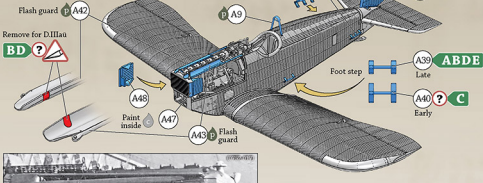
A39 > Late small foot step from 5185/18 B



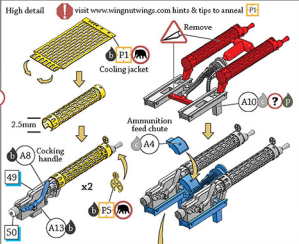
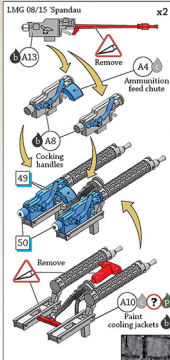
Rudder detail from the unidentified Marine-freikorps Junkers D.1 seen on page 22.



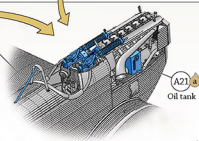
< Fuselage lifting handle detail from 5183/18(?) seen on page 18.



^ Flash guard detail from the unidentified FA 416 Junkers D.1 seen on page 22. Note the cut out required to accommodate the horizontal air pump of the 200hp Daimler-Mercedes D.IIIaU engine and the large flange radiator filler cap (A5).



> Engine bay detail from the unidentified FA 416 Junkers D.1 "Jko" seen on page 21. Note the oil tank and radiator water pipe.



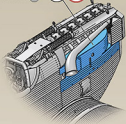
6 UNDERCARRIAGE & FINAL ASSEMBLY

> Starboard engine cowling detail from the unidentified FA 416 Junkers D.1 seen on page 22. Note thermometer, slot for viewing the oil level, oil tank filler hole and the radiator shutter.



Starboard engine cowling

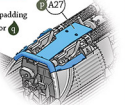
Paint inside



ABCD

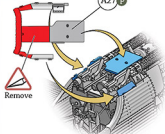
Paint padding

P A27



E

P A27



Remove

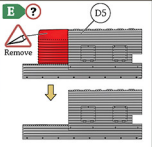


Modified cockpit opening from the unidentified FA 416 Junkers D.1 seen on page 22.

S6 ABDE



Port engine cowling detail from Junkers D.1 5185/18 . Note the partially detached engine access panel.



E ?

Remove

ABCD E24

Axial propeller

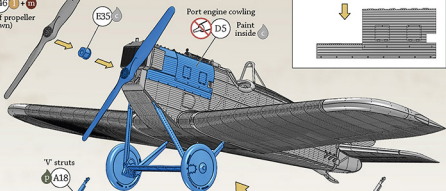
E E46

Niendorf propeller (not shown)



E35

Port engine cowling D5
Paint inside



V struts

P A18

P A31

A41

Axle

A44

Wheel cover

P A53

A53

Axle wing

P A34

Paint suspension cord detail

P A46

Wheels

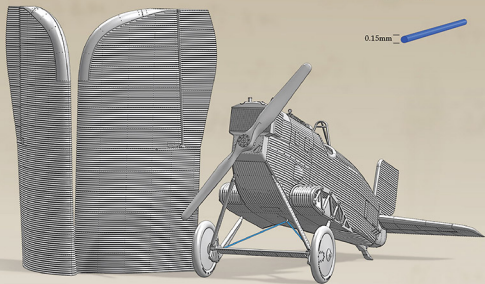
Paint tyres

A41

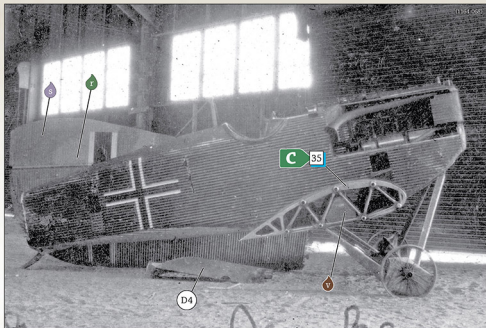




< Undercarriage detail from Junkers D.1 5185/18 . Note the partially visible 'Jko' marking painted on the wheel cover.

> Undercarriage detail from the unidentified FA 416 Junkers D.1 seen on page 22.

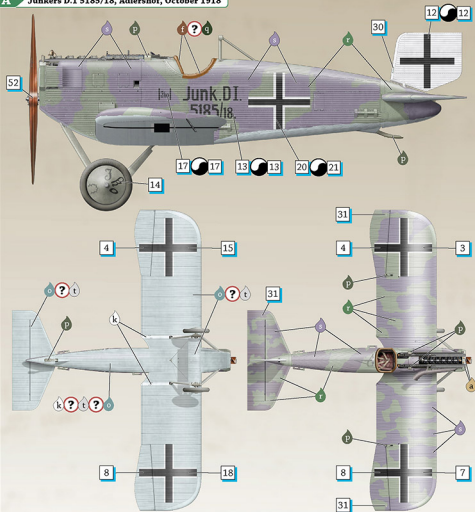


If you enjoyed building your Junkers D.1 why not try one of our more traditional First World War models. If you do, we highly recommend using stretchy elastic type rigging material like "EZ Line" etc and not trying to replicate any turnbuckles. If you follow this advice and the hints & tips on our website you will find that rigging is nowhere as frightening as many people try and make it appear. Give it a go!

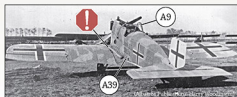


Junkers D.1 "Weisser Schwanz"  with its wings and tail removed, presumably inside hangar 5 at Romerantin. Note the main fuel tank in the wing root and the starboard engine cowling  on the ground under the fuselage.

A Junkers D.1 5185/18, Adlershof, October 1918

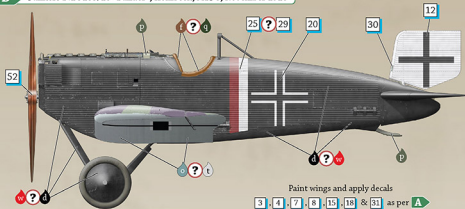


Newly completed 180hp Daimler-Mercedes D.IIIa powered Junkers 5185/18 is illustrated here as delivered in October 1918. It is believed that Junkers D.1 5185/18 was one of at least 4 aircraft, 5183/18 was another, dispatched to the front by rail on 2 October 1918 for service with the Marine-Feld-Jagdgeschwader (MFJG) in Belgium. See also **B**.

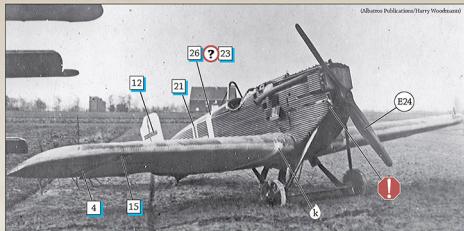


Junkers D.1 5185/18 is shown here in September or October 1918. The factory applied camouflage consisted of "pale green, with irregular patches of light mauve on top" while the undersides are off white or possibly light blue as illustrated above. Although appearing to be applied with a spray gun, the paint is actually applied by brush. Note the partially unfastened engine access panel, "Jko" marking on the wheel covers and Axial propeller without decals. Windscreens do not appear to have been retained on aircraft in service.

B Junkers D.1 5185/18 "Bänder", Hombeek, MFJG, November 1918

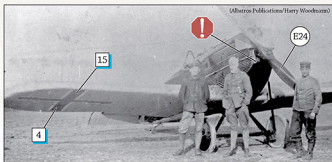


Albums Publications/Harry Woodhouse



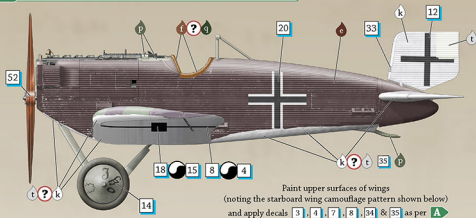
This previously unidentified Junkers D.1 was found abandoned at Hombeek, Belgium on 21 January 1919. Unlike the chocolate brown 5183/18(?) seen on page 18 and **C**, this Junkers D.1 fuselage has been completely overpainted in a colour so dark that the black of the balkenkreuz is indistinguishable, indicating black as the most likely colour, although red is another possibility. The colours of the fuselage bands are unconfirmed but one is so pale as to almost certainly be white while the other appears dark enough to be red (for a black fuselage) or black (for a red fuselage) or possibly even yellow **22** + **24** or green **27** + **28** depending on the type of film used to take the photographs. Close inspection of the wing camouflage pattern "fingerprint" visible in other photos reveals that this is actually Junkers D.1 5185/18 **A**. The completely overpainted fuselage, undercarriage and the band markings all indicate that 5185/18 "Bänder" saw active service with MFJG before the Armistice. The lack of a visible D.IIIa vertical "fat" air pump may indicate that 5185/18 now has a 200hp Daimler-Mercedes D.IIIa engine fitted or, perhaps more likely, the valuable brass parts of the D.IIIa pump have simply been removed.

This unidentified Junkers D.1 bears numerous similarities to 5185/18 above (including a small dent in the corner of the radiator) and may show it before the fuselage was fully overpainted and the band markings added. Despite the imperfections in this photograph it may very well be unique in showing an aircraft in service with MFJG before the Armistice. Note the visible white outline to the wing balkenkreuz marking indicating that if the underside colour was white (as noted in the Air Ministry report on 5183/18?) then it was a decidedly off white pale cream colour **t** or very light blue **o**, although the underside of the fuselage may very well be white **k**. The pilot at the centre appears to be recovering from a head wound.

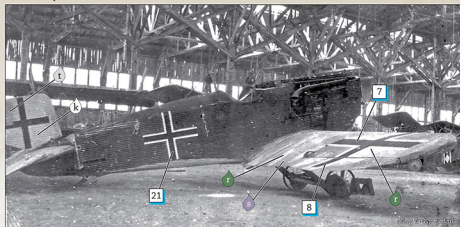


Albums Publications/Harry Woodhouse

C Junkers D.1 "Weisser Schwanz", Hombeek, MEJG, November 1918



Junkers D.1 "Weisser Schwanz" (white tail) was another aircraft found abandoned at Hombeek on 21 January 1919. It was subsequently transported to Romerantin by the Americans for storage and, one presumes, a thorough investigation. It is believed that this aircraft is finished in the same "chocolate brown" overpainted fuselage, "pale green", "light mauve" and "white" as Junkers D.1 5183/18(?) found abandoned at Evere. Despite the Junkers D.1 being met with suspicion by many pilots it was enthusiastically embraced by Marine-Feld-Jasta (MFJ) pilots Gotthard Sachsenberg and Theo Osterkamp so it was no surprise that the first production aircraft were allocated for MFJG use.

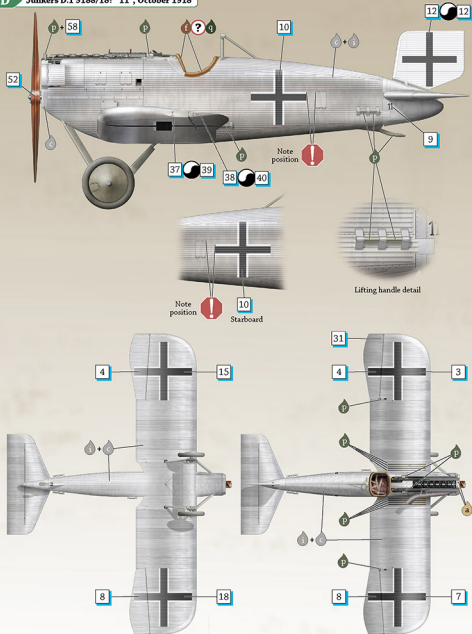


Junkers D.1 "Weisser Schwanz" inside hangar 5 at Romerantin. Note the repair patch on the rudder, camouflage pattern on the starboard wing and numerous scratches etc which can be used as "fingerprints" to identify each airframe. The valuable rubber tyres had been removed before "Weisser Schwanz" was found abandoned at Hombeek on 21 January 1919 but the "Jko" marked wheel cover exteriors were removed sometime later, before these photos were taken. An Albatros build Fokker D.VII from Jasta 71 can be seen at the far right.



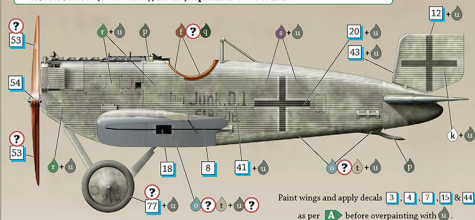
Junkers D.1 "Weisser Schwanz" outside hangar 5 at Romerantin. Note the tones of the "pale green" and "light mauve" camouflage on the wings. Despite being quite well photographed it is not known if the footstep was the large early type (AW) seen on J 9 I/1 (5180/18) J 9/II, J 9/III(?) "Junk D I" & 5183/18(?) or the smaller late type (AS) seen on 5185/18. If this aircraft is 5181/18 or 5182/18 it will have the early large footstep but if it was 5184/18 then it could have been either.

D Junkers D.1 5188/18? "11", October 1918



This Junkers D.1 was photographed on its back following an accident on 3 October 1918 which presumably occurred during testing. Unfortunately it is not possible to determine whether it was powered by a 180hp Daimler-Mercedes D.IIIa or 200hp D.IIIaII engine but we have chosen to illustrate it with the latter. The wings and fuselage are unpainted duralumin and feature the irregular and subtle "tiger stripe" finish noted on other unpainted J 9 and D.1. The rudder has been painted white and the wheel covers have been painted in a colour believed to be the pretty standard German Army grey-green illustrated here. There is a (factory work number?) "11" painted on the tail under the port horizontal tailplane. Note the small stencils on the tips of the wings and ailerons. The damage shown in the crash photos appears eminently repairable and presumably "11" went on to be given a coat of camouflage paint and, if "11" represents the work number MI 11, possibly the serial number 5188/18? before being shipped off to MFJG in Belgium or Kampfgeschwader Sachsenberg as per **E**.

E Junkers D.1, Gotthard Sachsenberg? (31 victories), Theodore Osterkamp? (38 victories) & Josef Jacobs? (48 victories), FA 416, September-October 1919



This unidentified 180hp Daimler-Mercedes D.IIIa powered Junkers D.1 was one of about a dozen or so that served with Flieger-Abteilung 416 (FA 416) of Kampfgeschwader Sachsenberg in 1919. Like other Kampfgeschwader Sachsenberg Junkers D.1 seen in mid to late 1919, the factory applied finish has been thinly overpainted with a camouflage colour, thought to be a grey-green, that has partially obscured the national markings and serial number (although 5189/18 [41] & [42] is plausible it is completely unverified). It is not known for certain if Gotthard Sachsenberg, Theo Osterkamp or Josef Jacobs flew this specific FA 416 aircraft but with so few Junkers D.1 available it would seem inevitable that they would have at one time or another.

Gotthard Sachsenberg had been a Sea Cadet since 1913 and when war broke out was assigned as an observer in two-seat aircraft at Marine Feld Abteilung 2 (MFA 2). Following pilot training in 1916 he returned to fly Fokker Eindeckers and when MFA 2 became Marine-Feld-Jasta 1 (MFJ 1) in February 1917 Sachsenberg was made commander, being credited with his first victory on 1 May 1917. He had been credited with a total of 31 victories by the Armistice and was Commander of MFJGr 1. In 1919 he commanded Kampfgeschwader Sachsenberg in support of Freikorps units in the confused fighting in the Baltic. In September 1919 he wrote a letter to professor Junkers commenting on his experiences in the Baltic noting that "The Junkers aircraft have proved themselves beyond all expectation". Sachsenberg died in 1961 aged 69.

Theodore Osterkamp served as an observer until he underwent pilot training in March 1918. He flew with MFJ 1 from 14 April 1917 and was credited with his first victory on 30 April 1917 and was made made commander of MFJ II on 15 October 1917. He had been credited with a total of 32 victories by the Armistice and served with FA 416 in 1919. He joined the Luftwaffe in 1935 and was credited with 6 additional victories between 11 May 1940 and 19 July 1940. Osterkamp died on 2 January 1975 aged 82.

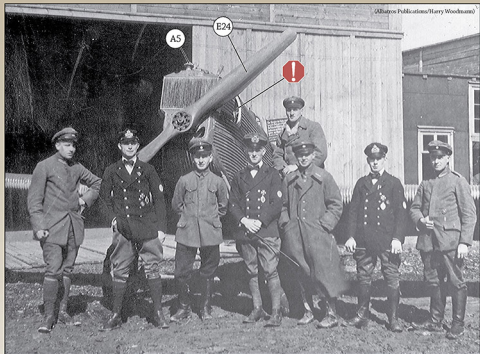
Josef Jacobs was a trained civilian pilot and joined the German Air Service when war broke out. He flew Fokker Eindeckers in 1916 and was credited with his 1st victory (a balloon) in March 1916. He commanded Royal Prussian Jasta 7 from August 1917 until the Armistice, by which time he had been credited with a total of 48 victories. In 1919 he served in FA 416, reportedly crash landing a Junkers D.1 after it was hit by ground fire. After the fighting died down he maintained his interest in aviation, along with other high speed pursuits such as Bobsledding and speedboat and car racing. He was not a great fan of the Nazis and was compelled to go into hiding in the Netherlands for a while during the Second World War. Jacobs died on 29 July 1978 aged 84.



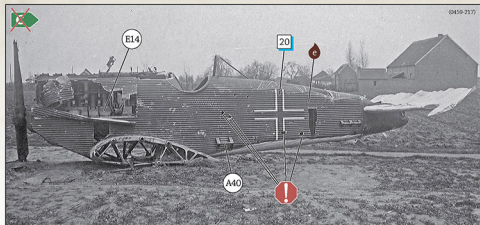
180hp Daimler-Mercedes D.IIIa powered Junkers D.1 reportedly photographed at Peterfelde, Latvia on 9 October 1919. Note the thinly overpainted rudder, tailplane, fuselage and upper surface of the wings. It is not confirmed if this finish extended to the undersides of the wings. A Fokker D.VII can be seen in the background.



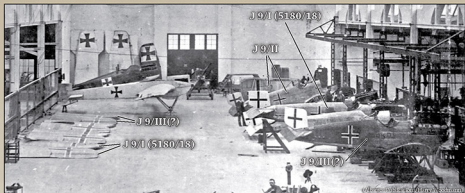
Three unidentified Junkers D.1 from Flieger-Abteilung 416 of Kampfgeschwader Sachsenberg being prepared for flight in mid 1919. Note that the port engine cowling panel immediately behind the radiator has been removed from all 3 aircraft presumably to improve engine cooling during summer. All wear a similar overpainted camouflage finish to E and, like other Junkers D.1 of FA 416, carry no obvious individual markings. Not seen in this image are 3 Junkers Cl.1 of FA 417 in the background.



This 200hp Daimler-Mercedes D.IIIaü powered Junkers D.1 of FA 416 from Kampfgeschwader Sachsenberg is seen here in Latvia in mid 1919. The port engine cowling panel immediately behind the radiator has been removed and the fuselage appears to have received a camouflage overpaint similar to **E**. Note the radiator filler cap **A5** and thermometer. Gotthard Sachsenberg is in the middle holding a cane.



This 200hp Daimler-Mercedes D.IIIaü powered Junkers D.1 was found abandoned at Evere in Belgium in January 1919 and appears similar to **C** but it is not the same aircraft. This airframe formed the basis of an Air Ministry report re-published in Flight magazine in April 1920 which noted that it had clearly "been struck by several bursts of machine-gun bullets" intimating that it had seen some action before the Armistice. The "MI 6" stenciled on the wing rib is consistent with this being one of the first few production aircraft manufactured and, although not shown in this photograph, the starboard wing camouflage "finger print" shown in the Air Ministry report matches that of 5183/18 seen loaded on a railway wagon for dispatch to the front on 2 October 1918, tentatively identifying this as 5183/18. The report notes that this particular airframe had its fuselage upper surface camouflage overpainted "...a chocolate-brown colour except underneath..." where it was "white". The wings were "... painted pale green, with irregular patches of light mauve on top, and white underneath. The tail planes and elevator are white above and below". Note the bullet holes and that just about everything that is easy to unscrew or tear off had been souvenired by the time this photograph was taken.



Junkers factory photo from 8 August 1918 showing (clockwise from left) four sets of Junkers J 9/D.1 wings (the nearest of which appear to be for J 9/I (5180/18) and the furthest from J 9/III(?) "Junk D I", the sole J 1, two disassembled J 2, the nose of an unidentified long fuselage J 9, disassembled J 9/II, an unidentified long J 9 fuselage, J 9/I fuselage (see opposite), an incomplete short D.1 fuselage (not the disassembled J 7 prototype as previously thought) and finally the camouflaged & shortened fuselage of J 9/III(?) "Junk D I" seen opposite.



The original 120hp Daimler-Mercedes D.II powered steel skinned Junkers J 1 photographed on 12 December 1915.



120hp Daimler-Mercedes D.II powered steel skinned Junkers J 2 E251/16 photographed in July 1916. Although six J 2 were built it proved to be too heavy and underpowered for front line use, despite being trialled with a 160hp Daimler-Mercedes D.III engine.



200hp Benz Bz.IV powered Junkers J 4 prototype photographed on 3 May 1917. The J 4 went into production as the armour plated ground attack Junkers J.1 with 227 built by Junkers-Fokker (Jfa) before production was halted in 1919.



160hp Daimler-Mercedes D.III powered Junkers J 7 photographed on 12 October 1917 after it's rotating wing tips had been replaced by more conventional ailerons. Note the radiator mounted above the engine and style of exhaust manifold. Although not legible in this print, the wheel covers carry "Junkers & Co Dassau" markings.



160hp Daimler-Mercedes D.III powered Junkers J 7 photographed on 3 May 1917, now with a nose radiator, new exhaust and post April 1918 balkenkreuz markings. Not visible in this print, the wheel covers of Junkers & Co built J 7 were now curiously marked with "Jfa", most likely representing Junkers-Fokker for political and/or marketing reasons.



Frequently misidentified as the sole 185ps BMWIIa powered D.1 from October 1918, this 200hp Daimler-Mercedes D.IIIa powered long fuselage Junkers is now believed to almost certainly be J 9/I photographed around the time of the 2nd fighter competition in June 1918. Note the dull appearance of the unpainted duralumin and mix of post March 1918 "fat" and undersize post May 1918 "uneven arm" balkenkreuz markings.



Long fuselage Junkers J 9/II powered by the experimental 195ps Benz Bz.IIIb V8 engine photographed on 20 June 1918. Note the post May 1918 "uneven arm" balkenkreuz markings and comparative brightness of much of the horizontal tailplane surface compared to the rest of the unpainted duralumin. This specific airframe was type tested to destruction in September 1918.



Frequently misidentified as Junkers J 9/I, this 200hp Daimler-Mercedes D.IIIa powered Junkers (J 9/III?) "Junk D I" was photographed on 8 July 1918 (above right) and shows evidence of having it's long fuselage shortened aft of the rollover hoop. Note the position of the post May 1918 "uneven arm" balkenkreuz markings peculiar to Junkers (J 9/III?) "Junk D I" and J 9/II. The undercarriage of J 9/I, J 9/II and (J 9/III?) "Junk D I" had additional bracing struts/tubes (visible above) which were replaced by rigging wire on production aircraft.



Junkers factory photo from later on 8 August 1918 showing (from left) the starboard wing and fuselage of J 9/II, J 9/I, both unidentified long fuselage J 9 now side by side, the incomplete short fuselage J 9 and at far right the tailplane of the camouflaged shortened (J 9/III?) "Junk D I" seen above. Both J 9/I & J 9/II have extended elevators fitted with rounded corners.



Junkers J 9/I (5180/18) detail from the photo above showing that it's post March 1918 fuselage & rudder balkenkreuz have been overpainted with post June 1918 balkenkreuz. Note the enlarged elevator with rounded corners and that the unique cockpit fairing from J 9/II in the background has been removed.



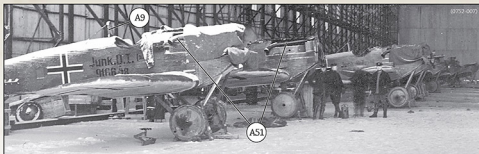
180hp Daimler-Mercedes D.IIIa powered Junkers D.1 5180/18, photographed during non-destructive type testing at Adlershof in September 1918. Close examination of photographic evidence indicates that this is J 9/I with it's original elevator reinstalled, updated undercarriage and painted in camouflage. Note the unique position of the post June 1918 "even arm" balkenkreuz markings on the wings.



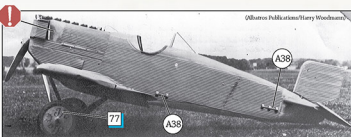
A sole Junkers D.1 was fitted with a 185ps (230hp) BMWIIIa engine in early October 1918 and this photo is thought to show it undergoing flight testing before being entered in the 3rd fighter competition later that month where it performed very well. Note the overall monotone finish (white paint has yet to be applied), lack of armament, Rupp quick release propeller boss commonly associated with the BMWIIIa engine and Heine propeller.



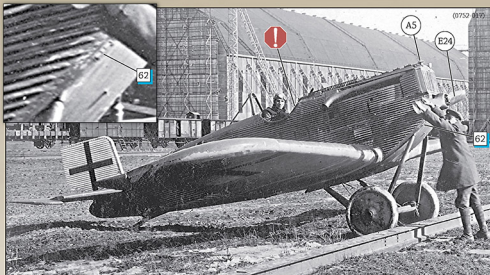
Three unidentified FA 416 Junkers D.1 inside a Zeppelin hangar at Wainoden in March 1919. All appear to wear their original factory applied camouflage finish. Note that the middle aircraft has "Jko" painted on it's wheel covers.



Junkers D.1 9166/18 and at least 6 other D.1 of FA 416 inside a snow covered Zeppelin hangar at Wainoden in early 1919. Although previously misidentified as a long fuselage aircraft, Junkers D.1 9166/18 has a short fuselage, as do all other "in service" Junkers D.1 identifiable in photographs available to us. Not shown here but on the other side of the hangar are aircraft from FA 417 including at least 4 Junkers CL1, 2 Halberstadt C.V and 2 LVG C.VI.



< An unidentified, unarmed and un-camouflaged Junkers D.1. Note the "Jfa Jfa" markings on the wheel cover indicating that it was one of the few Junkers-Fokker built aircraft. The non-corrugated panel immediately behind the radiator has not been noted on any in-service aircraft in photographs available to us. The small footstep shown here was introduced on Jko built D.1 between 5183/18(?) and 5185/18 but may have been standard on Jfa built aircraft.



This unidentified 200hp Daimler-Mercedes D.IIIau powered FA 416 Junkers D.1 is seen here at Wainoden in early 1919. Note the cut away cockpit front fairing which was a feature of the later production Junkers D.1 from this unit. The fuselage weathering and camouflage is similar to that seen on the uncowled aircraft seen on page 21 and this could very well be the same aircraft. Not shown here but in the background of the original print are LVG C.VI 9037/18? and Junkers Cl.1 "K" from FA 417 along with another unidentified FA 416 Junkers D.1.



Product Design by Jason McAdam

From a very early age Jason has embraced his creative side, whether it be through drawing or modelling. This creative nature was strongly grafted with a passion for transportation design, whether it be by land, air or sea.

Having graduated with an honours degree in Industrial Design Jason has gone on to develop his skills further in his design work with Weta Digital. While at Weta, Jason has continued to push the boundaries of software technologies and applications, with a keen eye for detail.

This passion for design comes hand in hand with a love of sport and recreation, with motorbike riding being among the more popular of past times.



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.



Profile Art by Ronny Bar

Ronny Bar developed a keen interest in airplanes from an early age, living close to 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 *Windssock Worldwide*, *Windssock Datafiles*, *Cross & Cockade* and *Over the Front*.

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



32065 Product Manager, 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 TamijaCon(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



32065	1/32 Junkers D.1	Qty
0132065A	A parts	1
0132065B	B parts	1
0132065D	D parts	1
132E0005	E parts Merc D.III engine	1
0132065P	Photo-etched metal parts	1
7132065	Instructions	1
9132065	Decals	1

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



32058 - 1/32 Jeannin Stahltraube (1914)



32073 - 1/32 Sopwith SF1 Dolphin



32067 - 1/32 Fokker D.VII (Fok) "Early"

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