

Albatros Flugzeugwerke GmbH were responsible for some of the most graceful and effective fighters of the Great War. Their twin gun, semi-monocoque plywood Albatros D.1 powered by a 160PS Daimler Mercedes D.III engine arrived at the front in September 1916 and achieved instant air superiority over its main opposition of Nieuport 11 and DH.2 fighters. Followed immediately by the slightly improved D.II and in December by the much improved D.III with a V strutted sesqiplane wing greatly influenced by the successful Neiuport fighters. The D.III was more maneuverable than the D.II and its single spar lower 'half' wing afforded greater visibility for the pilot but was also the cause of numerous, and usually fatal, structural failures. Despite much effort this problem was never completely resolved. Nevertheless the D.III remained in production well into late 1917.

Even as the excellent D.III went into production plans were underway for its successor, the Albatros D.V. Retaining the wings of the D.III but with aileron controls routed through the upper wing and with a redesigned fuselage completely oval in section, the D.V was arguably the best looking of all Albatros designs. Unfortunately it inherited the lower wing structural failure problem of the D.III and turned out to not be any real improvement over its predecessor. Despite this the Albatros D.V, along with the slightly re-designed D.Va, was manufactured in greater numbers than any previous German fighter of the war (only surpassed later by the Fokker D.VII, of which incidentally Albatros manufactured the great majority). One must presume, given the D.V's apparent shortcomings, this was because Albatros had the production capability to fulfill the requirements of the rapidly expanding number of Jagdstaffelin required by the Amerika Program. And it was available.

Appearing in May 1917 and shortly outclassed by the improved SE.5a, Sopwith Camel and SPAD fighters being fielded by the allies at the time, in the hands of a talented pilot the beautiful (and plentiful), Albatros D.V and D.Va were quite capable of holding their own. Flown by most of Germany's top aces of the time, Albatros D.Vs continued to provide good service even when superceded by the newer Fokker Dr.1, Pfalz D.III and IIIa fighters. Even after the introduction of the superb Fokker D.VII, Albatros D.Vs could still be found equipping front line Jastas right up to the armistice, though most had been relegated to training duties by this time. Any history of this important aircraft here is of necessity very brief, therefore we encourage you to seek out any, or all, of the reference books mentioned below for a more thorough understanding of this important aircraft.

WW1 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 colourful unit and personal markings applied to the various German fighters 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. Albatros D.V fuselages were clear varnished for protection and usually left the factory in this natural yellowish plywood colour. Wings and horizontal tailplanes were usually painted with mauve and green camouflaged upper and pale blue lower surfaces, though some were covered in pre-printed 'lozenge' camouflage material, usually applied chordwise but a very small number had this applied spanwise. This combination of a yellowish fuselage and greenish wings created an appearance which lead some allied pilots to refer to Albatros' encountered in combat as 'Banana Men'. Rudders were usually left in clear doped linen, though some were covered in 'lozenge' fabric. Metal fittings were painted in a grey-green primer, as was the wood interior of the engine bay. Exterior metal panels were finished in this same grey-green colour or light grey, the interiors were left unpainted aluminium. Many units applied additional drab coloured paints to their Albatros fuselages, often dappled on with a sponge, to aid camouflage, conversely unit and personal markings were generally of a highly visible nature to aid identification at a distance.

Wingspan:	Length:	Max Weight:	Max Speed:
9.00m (29'6")	7.36m (24'2")	915kg (2018lb)	170kph (106mph)
No. manufactured:	Production:	Engine:	Ceiling:
D.V 900 (D.Va 1662)	April 1917 – late 1917	Daimler-Mercedes D.III, D.IIIa	6250m (20500')

Armament:

2x 7.92mm LMG08/15 'Spandau'

References:

Windsock Datafile 3 Albatros D.V, Ray Rimell, 1987 – Albatros Fighters Windsock Datafile Special, Ray Rimell, 1991 – Osprey Albatros Aces of WW1, Norman Franks, 2000 – Osprey Albatros Aces of WW1 part 2, Greg VanWyngarden, 2007 – Squadron Signal Albatros Fighters in Action, John F Connors, 1981 – Australian War Memorial Museum, Canberra, Australia – 1914-18 Aviation Heritage Trust – The Vintage Aviator LTD - Private Collections.

www.wingnutwings.com



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.

Painting: Only use paints 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. 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.

SYMBOLS

1 Construction Step



Choose



Attention



Remove

(A1) Part Number

Decal



Do Not Cement



Option



Drill

2

Photo Etch Part



Cement For Metal



Other Side

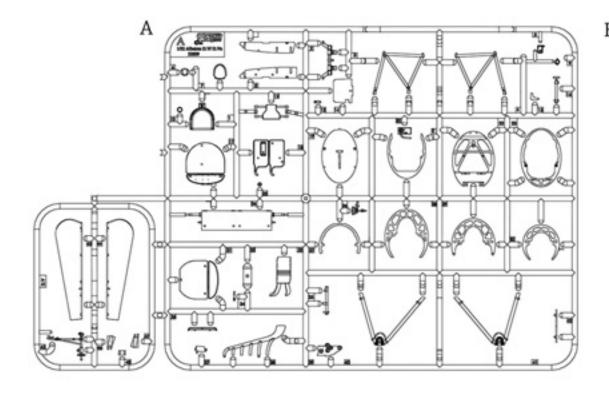


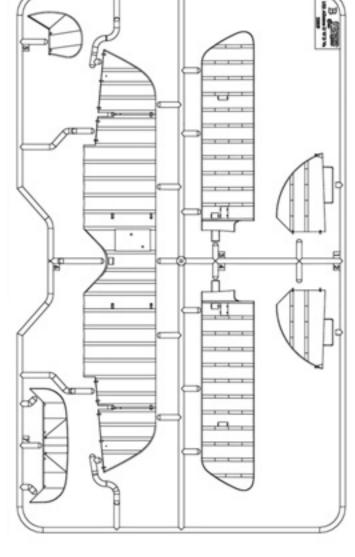
Paint Colour

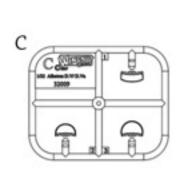
PAINT COLOURS

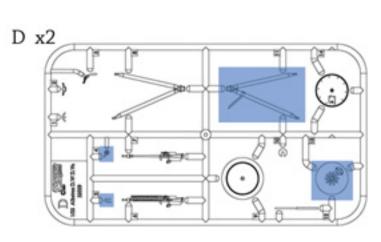
	All colours	Tamiya	Humbrol	Misterkit
a	Brass	X31	54	
b	Gun Metal	X10	27004	
с	Aluminium	XF16	27001	
d	Black - semi gloss	X18	85	
e	Dark Wood - gloss	XF68	98	
f	Leather - semi gloss	XF52	62	
g	Light Blue - gloss	XF23(x1)+XF2(x1)	65	GC03
h	Chrome Yellow - semi gloss	XF3(x10)+X6(x1)	24	GC14
i	Light Grey - matt	XF19	64	GC08
j	Interior Grey Green - matt	XF76	90	
k	Red - gloss	X7	19	
1	Rust - matt	XF9	113	
m	White - semi gloss	XF2	34	
n	Light Wood - gloss	XF59	93	
0	Mauve - gloss	X16(x1)+XF52(x2)	68(x1)+29(x2)	GC02
р	Steel	XF56	27003	
q	Clear Doped Linen - gloss	XF55	148	GC10
r	Camouflage green - matt	XF65	116	GC05
s	Copper	XF6	12	
t	Green - gloss	X28	208	
u	Silver Grey - semi gloss	XF16(x2)+XF19(x1)	27001(x2)+64(x1)	GC17
v	Rubber - matt	XF69	66	
w	Medium Grey Green - gloss	XF71	78	GC04

Note: Apply clear varnish to achieve the desired gloss or semi-gloss finish.

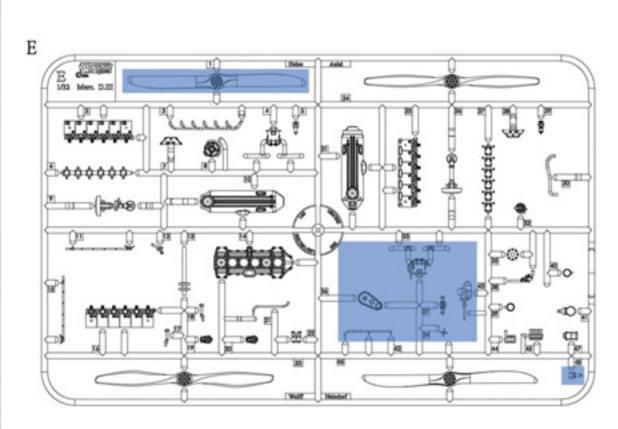


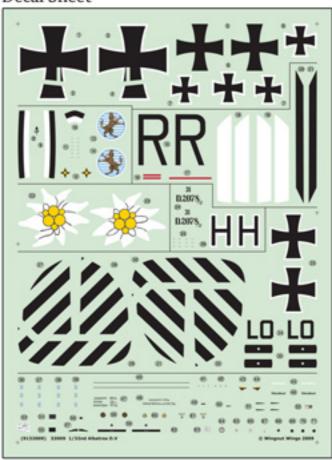












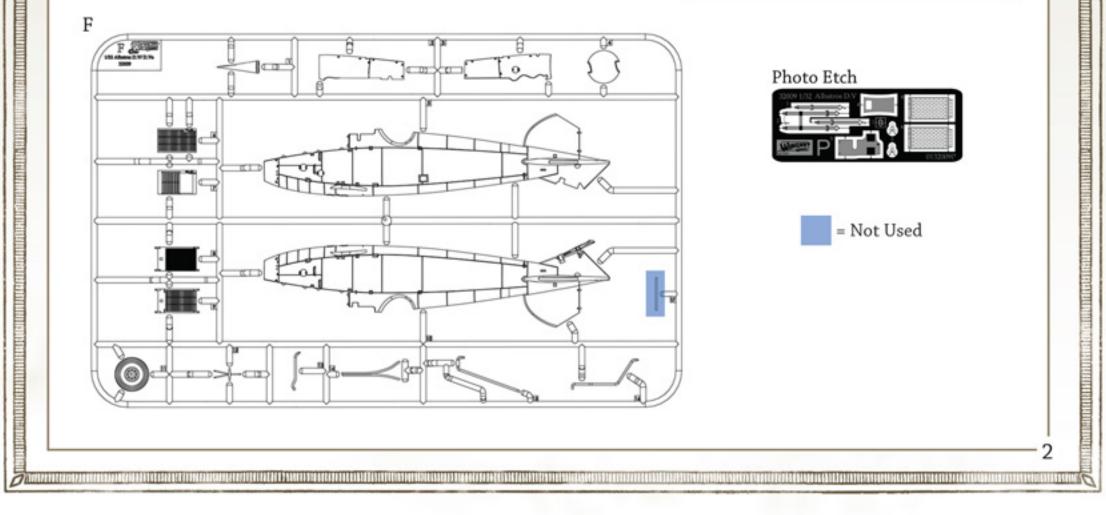
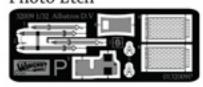
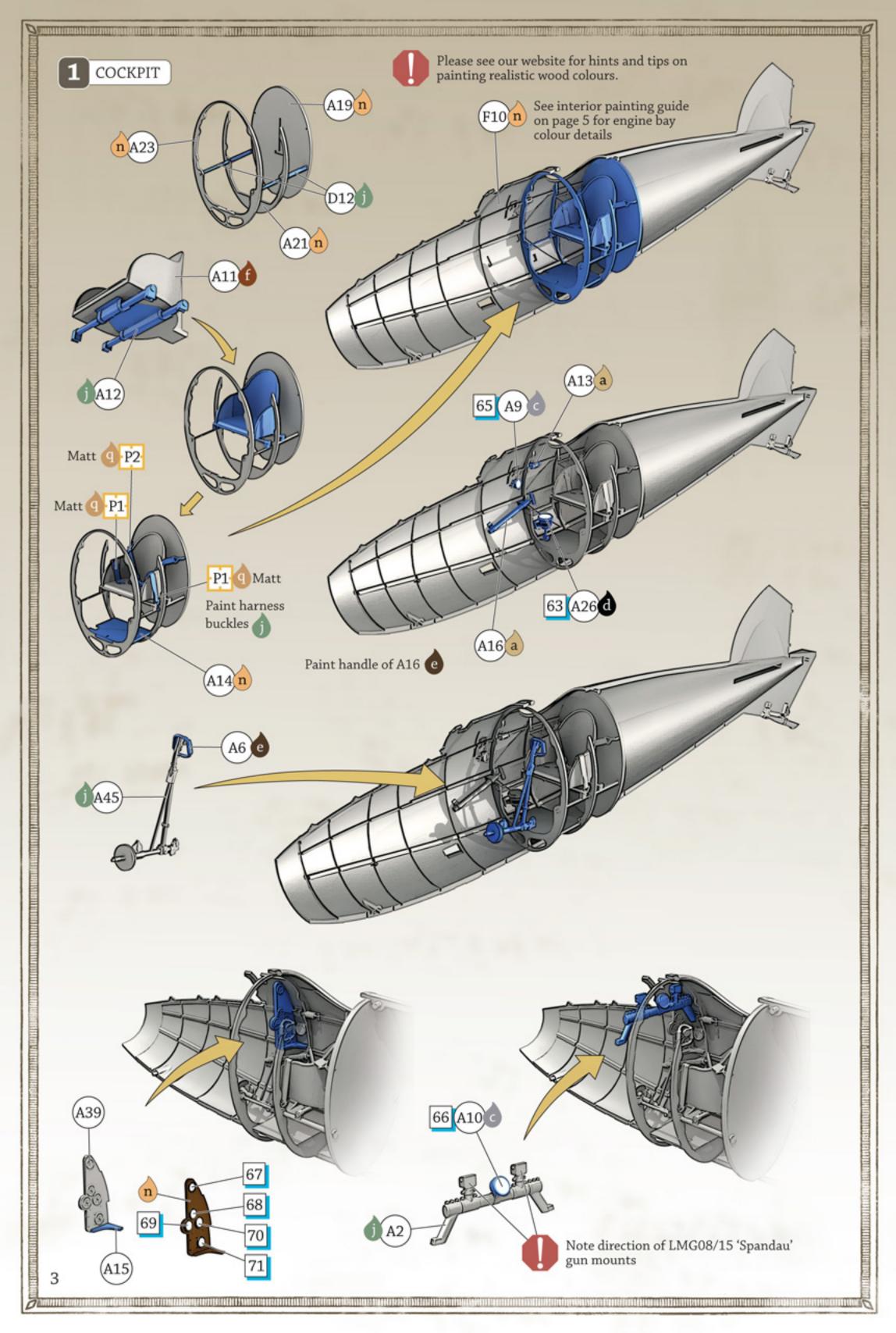
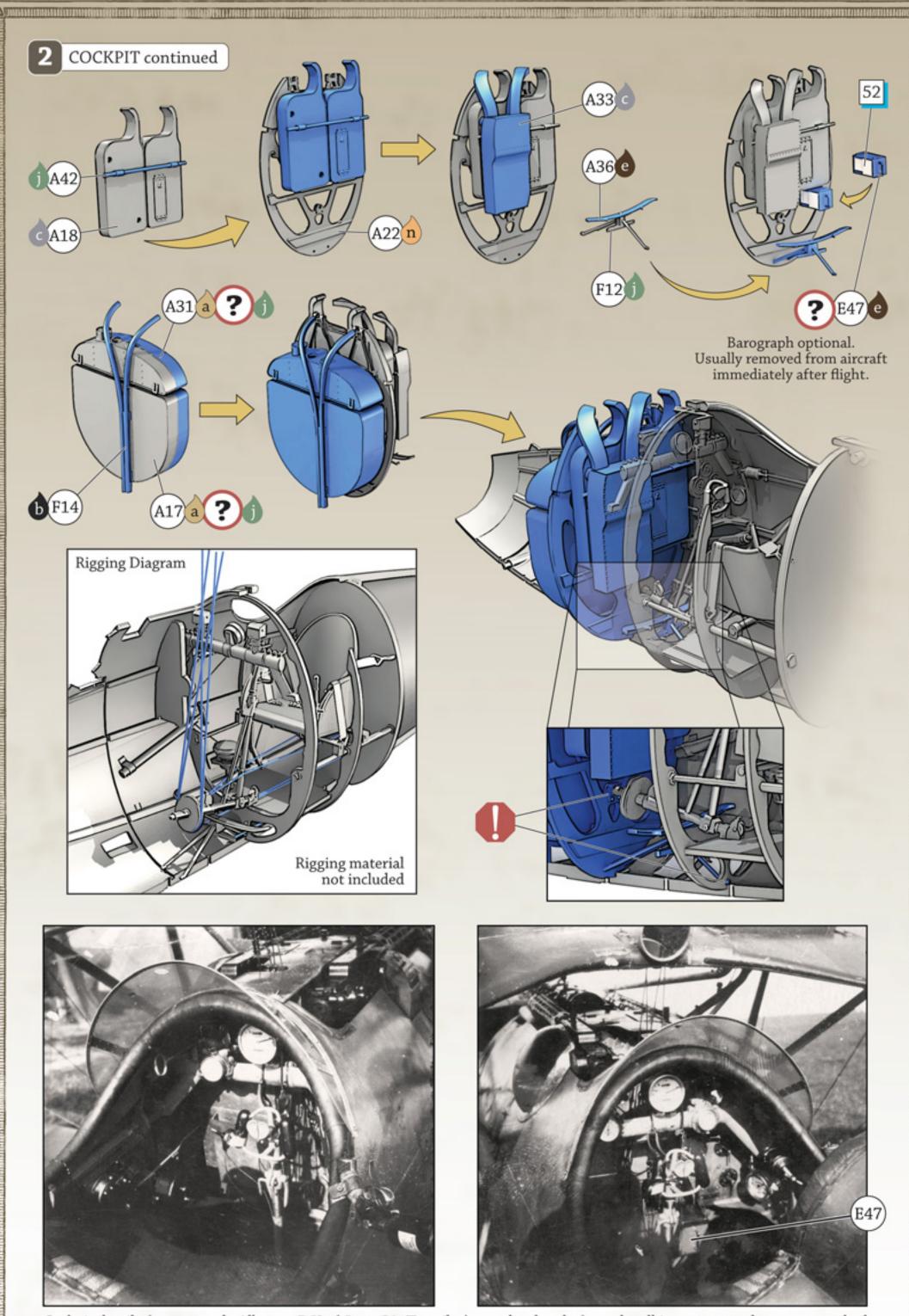


Photo Etch

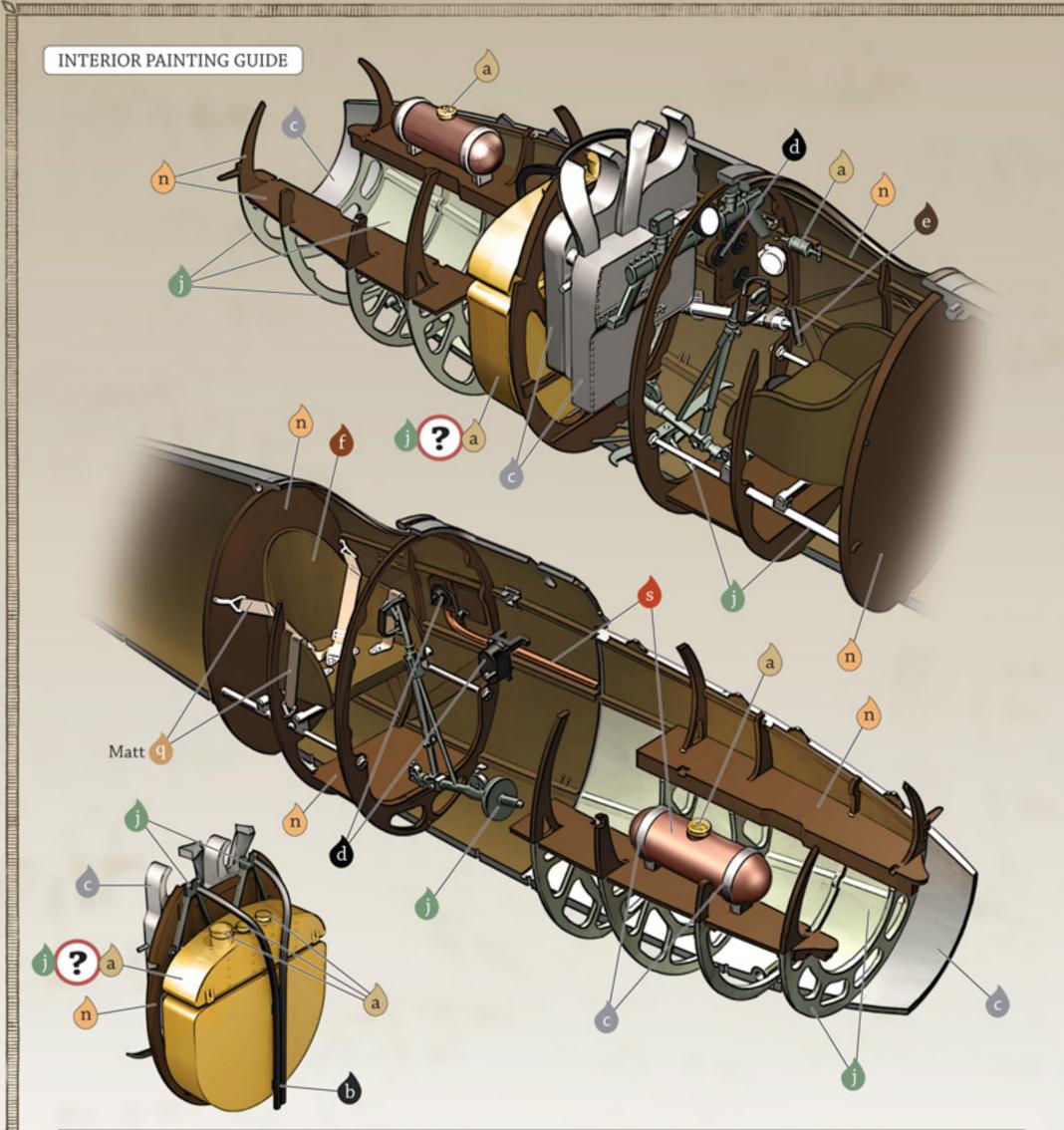








Cockpit details from an early Albatros D.V of Jasta 31. The pilot's goggles dangle from the all important tachometer attached to the center of the LMG 08/18 mount, with an altimeter to the left and clock to the right. There are many interesting details shown in these two photos, the headrest, aileron control cables, mirror attached to the aileron pulley inspection panel on the upper wing, barograph suspended below the instrument board just to the right of the control column and the flare gun attached to the right of the cockpit.





Karl Schattauer poses in front of his Albatros D.V most likely documenting a recent lucky escape. Two small cockade bullet hole patches have been applied to the fuselage, the most obvious of which is dead center in the middle of the cross, and larger repair patches have been applied to the upper wing. Note the flare rack attached to the right side of the cockpit and Daimler Mercedes radiator. This photo was most likely taken some time after Karl was posted to Jasta 16b on 22 September 1917. This interesting colour scheme will be available from Wingnut Wings shortly.

Interior details from Albatros D.Va 5390/17 from the Australian War Memorial Museum. Although this is a D.Va most of the details shown in these photos are the same as for the D.V modelled here. These photos depict 5390/17 before its most recent restoration and some of the interior metal part colours shown are a little suspect, most likely tarnished by a protective varnish yellowing with age.



Cockpit padding and LMG 08/15 ammo chute detail.



Windscreen and padding detail.



LMG 08/15 mount and empty ammo belt container detail.



Seat and 4 point harness detail, note the painted buckles.



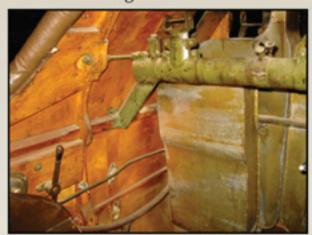
The rear of the engine, top of the fuel tank and front mounts for the LMG 08/15 machine guns.



Right engine bearer showing the mounts for the oil tank.



Padded seat and interior longeron detail.



Further details of the left side of the cockpit.



Close up of the LMG08/15 mount showing the empty bracket for the tachometer. Note also the various switches on the instrument board.



Underneath the right engine bearer. Note the interior grey green protective paint on the lower surfaces of the engine bay.



Note the small water pump, larger pump to pressurize the fuel tank and the Maximall fuel gauge.



Throttle and Bosch engine switch. The switch (key) of the Bosch switch is attached to the small chain just visible. You can often see these keys hanging from this chain outside the cockpit in archive photos when the engine is not about to be started.



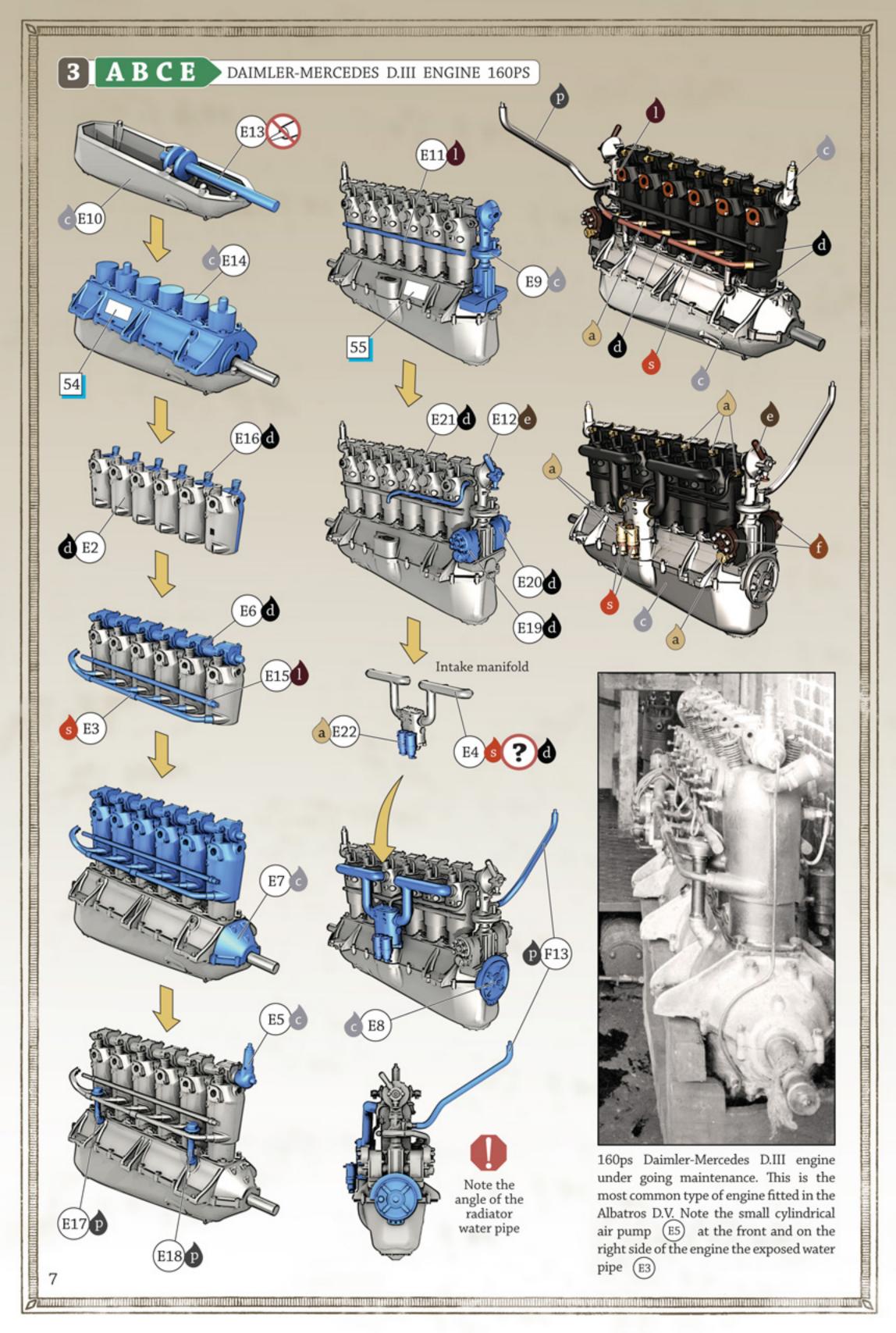
Left engine bearer. Note the engine shown here is a very late model Daimler-Mercedes D.IIIau featuring a generator mount that is not applicable for the D.V.



Good view of the LMG 08/15 mount and magazines.

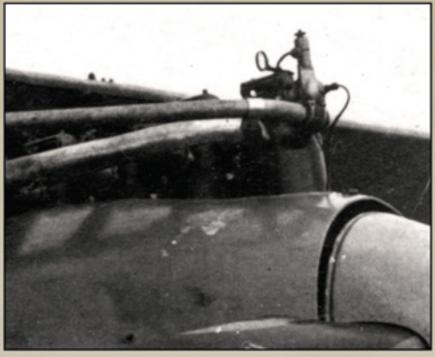


The inside of the fuselage behind the cockpit. This area was blocked off by a screen in service to block the air stream.

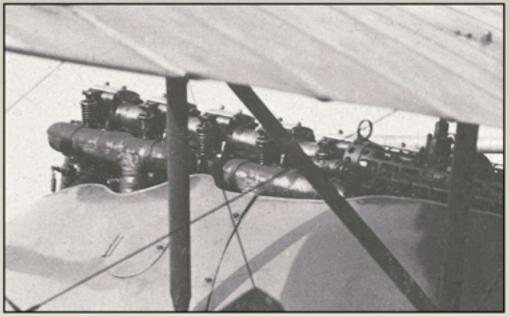




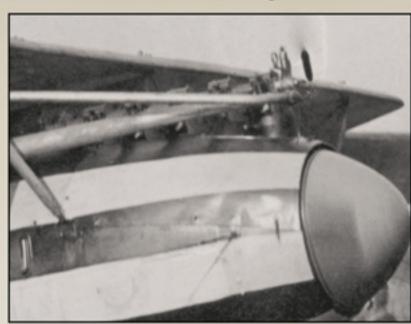
Engine detail from of Max Müller's Jasta 28 Albatros D.V D.1154/17 showing the small air pump and piping details of the 160ps Daimler-Mercedes D.III engine quite well.



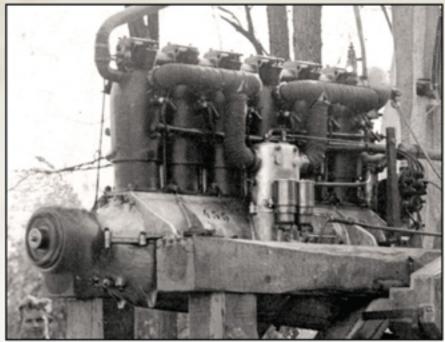
Note the ring sight attached to the top of the engine and the brace from the exhaust to the radiator water pipe in this detail shot of Claus von Waldow's Jasta 15 D.V pictured below.



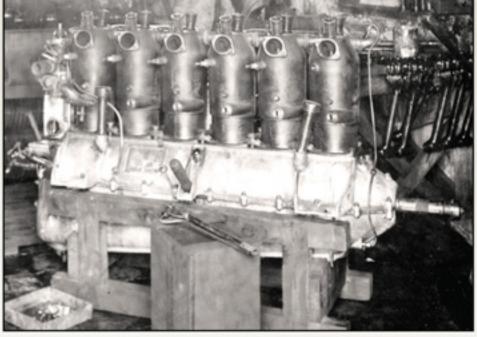
This unidentified Albatros D.V has an early version of the 160ps Daimler-Mercedes installed as witnessed by the small cylindrical air pump E48 located at the rear of the engine, sandwiched between the barrels of the LMG 08/15 'Spandaus'. Note how the rocker springs are centered on the rocker boxes, an identifying feature of the 160ps D.III engine.



This close up of Hans Auer's Jasta 32b Alabtros D.V shows another variation of the small ring sight attached to the front of the engine.



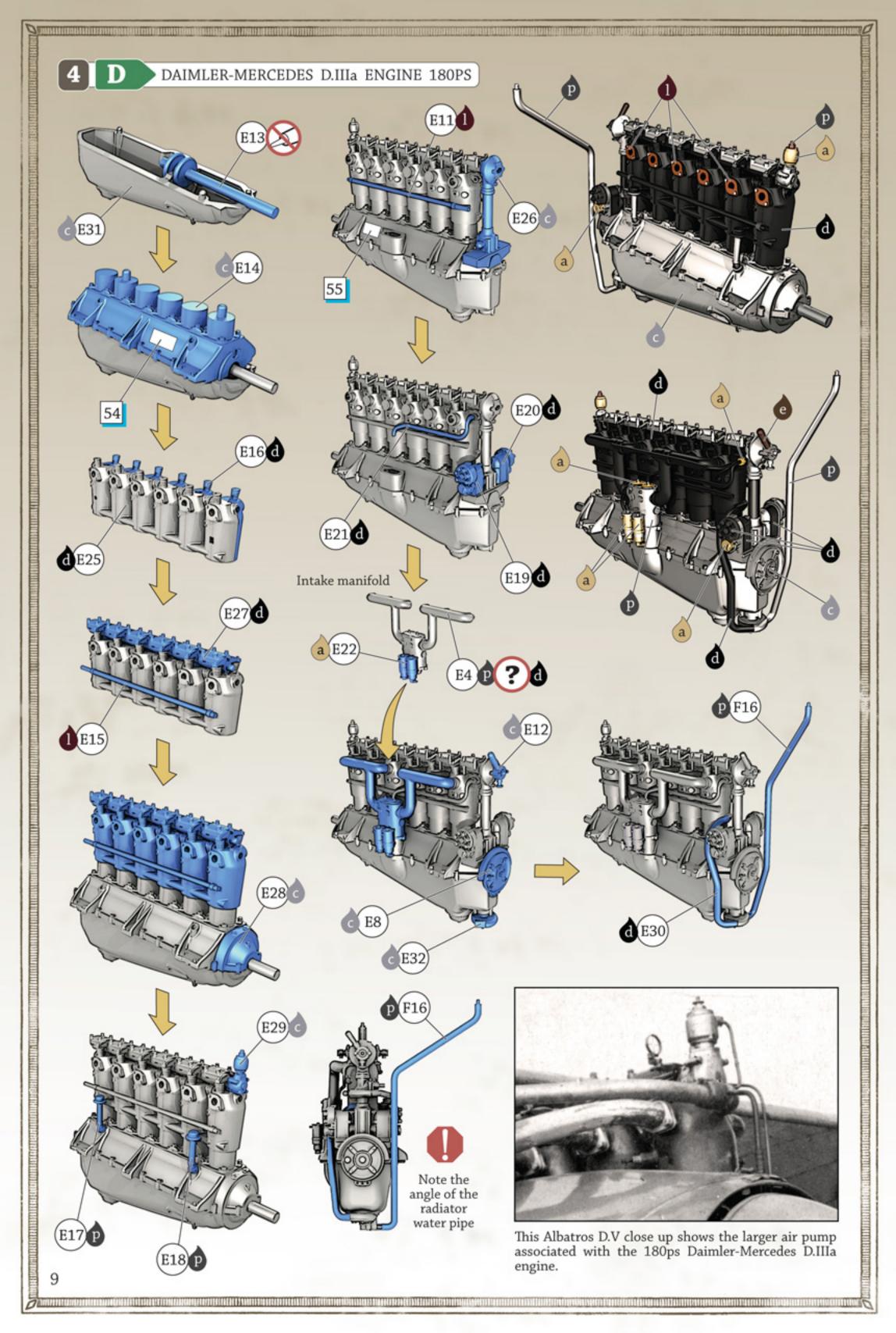
An early 160ps D.III engine gets a test run. Note the water pump at the rear and the engine number 455 painted on the side of the block and position of the data plate.



160ps D.III undergoing maintenance. Note the missing water pipe and the location of the data plate.



Claus von Waldow's Albatros D.V 'N' of Jasta 15 featuring a very interesting camouflage scheme. It appears the fuselage has been painted in light grey and then heavily mottled with dark green applied with a 'Loofa' sponge. The mauve and green wings have been completely painted over in light grey spots which appear to have been applied with a conventional brush.



DAIMLER-MERCEDES D.IIIa 180PS prior to restoration

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



Left hand 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 180ps Daimler Mercedes D.IIIa. Note the rocker boxes E27 are now positioned to the rear of the springs.



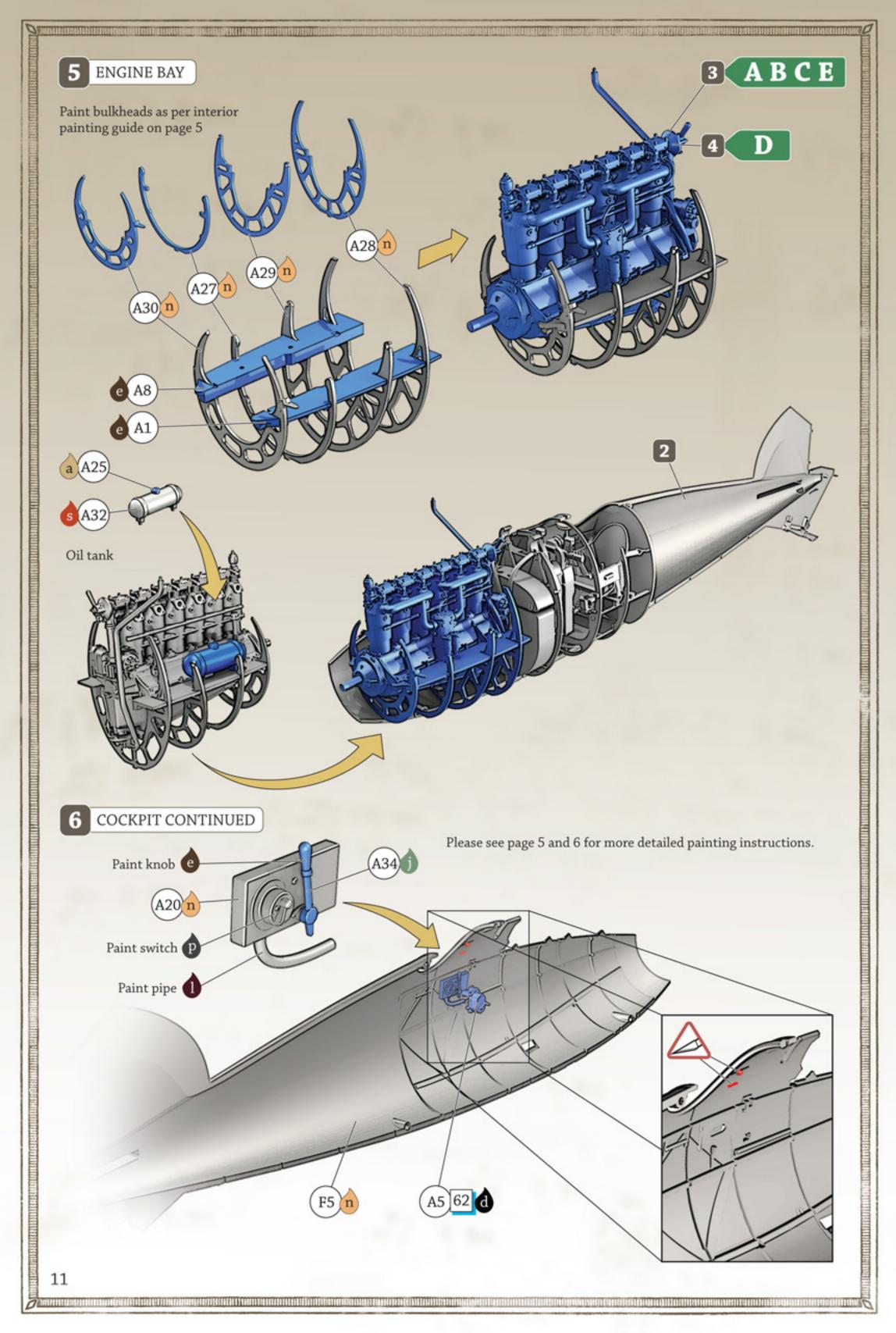
Right side of the engine. Note the newer location of the water pipe running through the cylinders and the position of the data plate.

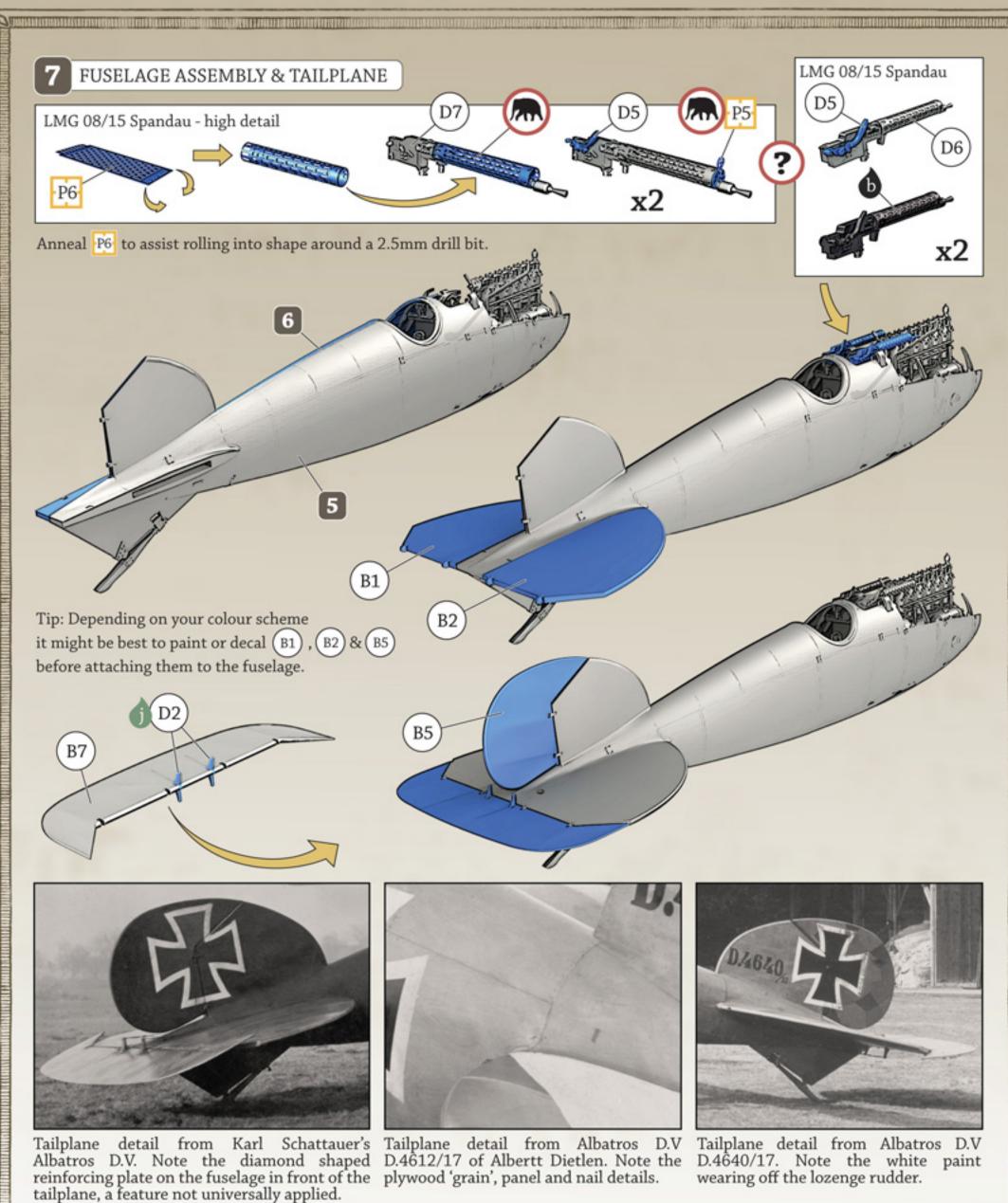


Rear left view showing the empty magneto mounts, water pipe and spark plug details.



Rear right view.

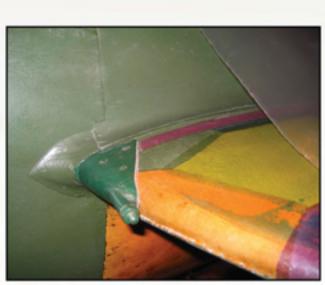




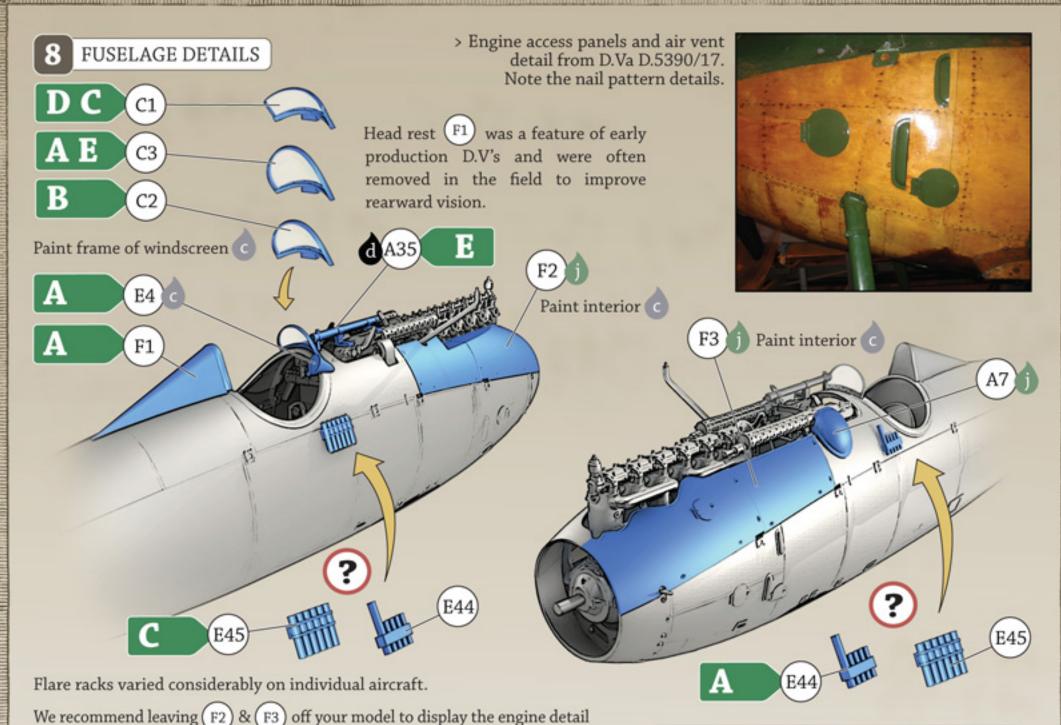
Fuselage lifting handle detail from D.Va D.5390/17 from the Australian War Memorial Museum.

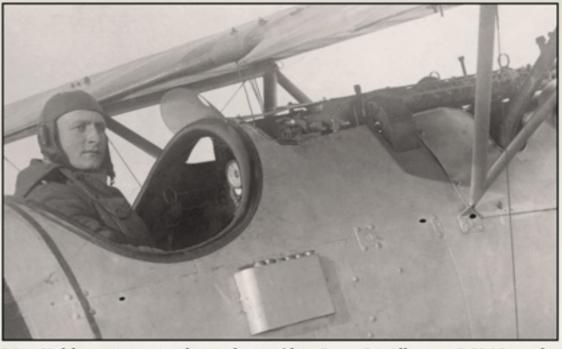


Tailplane detail from D.5390/17. Here we can see the access panels for the rudder control horn, elevator control cable outlet in the fuselage and tailskid brackets. Note the front half of the wooden tailskid is wrapped in linen for strength.



Horizontal tailplane Attachment detail from D.5390/17.





Max Kahlow sitting in the cockpit of his Jasta 34 Albatros D.V. Note the flare rack, ammo chute and windshield with 'peephole' cut out for sighting the guns. Max survived the Great War with 6 victories to his name and went on to become a Lufthansa pilot.



Flare pistol mount from Albert Dietlin's Jasta 41 Albatros D.V D.4612. The positioning of flare pistols and racks was left up to the individual pilots, ensuring a great variety for model makers. Note the weight table partially painted over by Albert's personal marking.

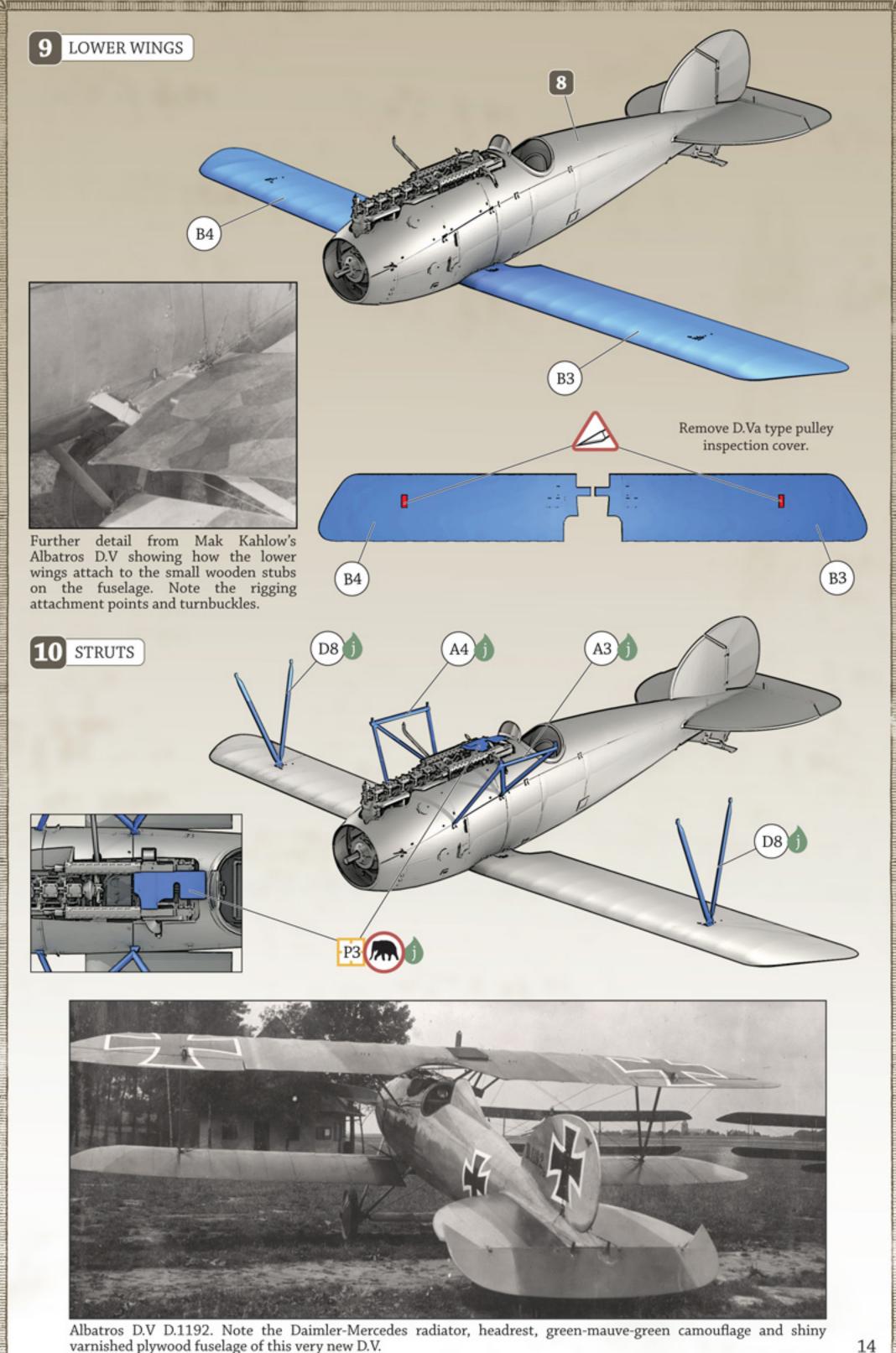


Further fuselage detail of Albatros D.V D.4612. Note that the fairing for the LMG 08/15 empty belt chute has been removed, unusual for the D.V but common for the D.Va, aileron pulley inspection panel and Teeves & Braun radiator.

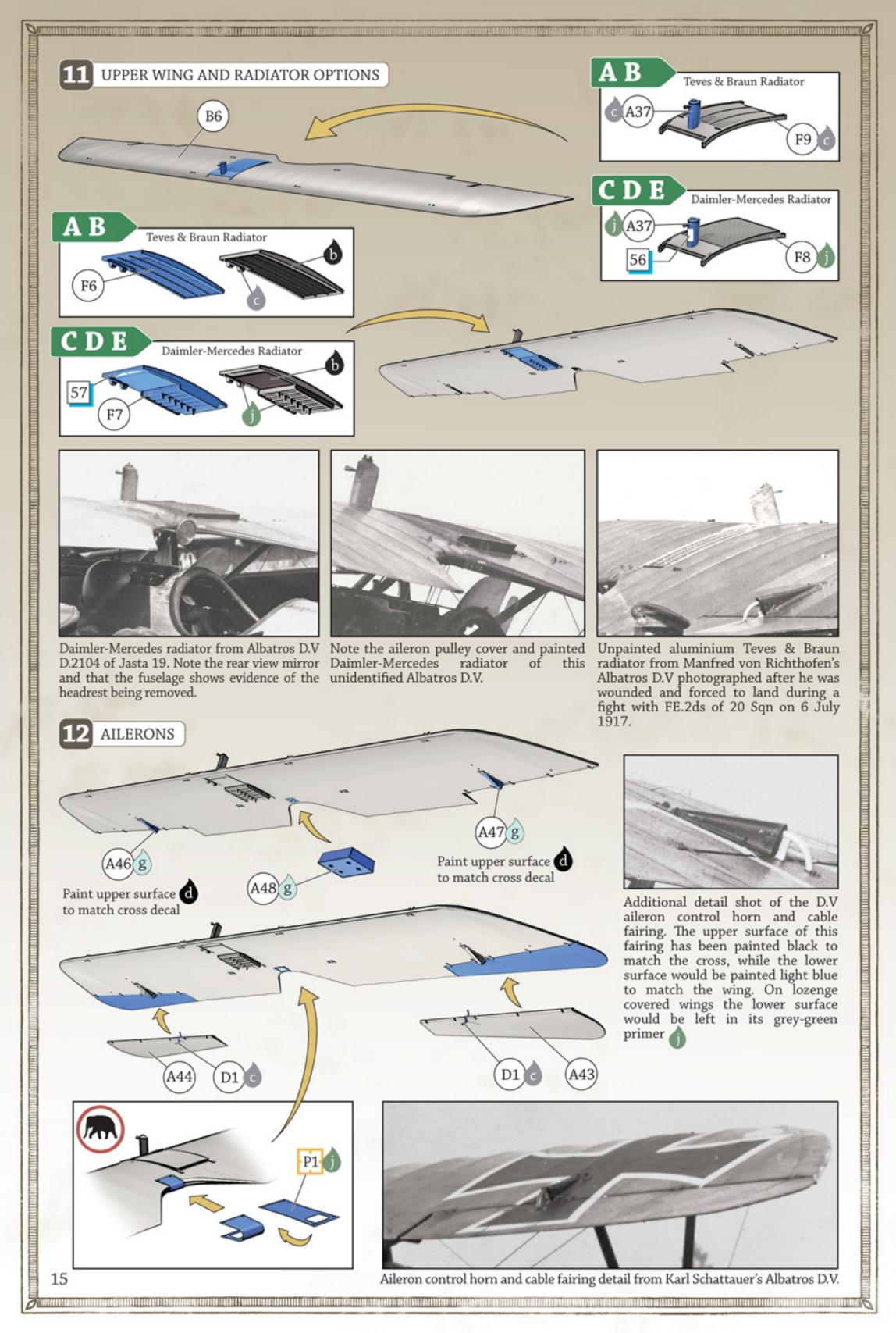


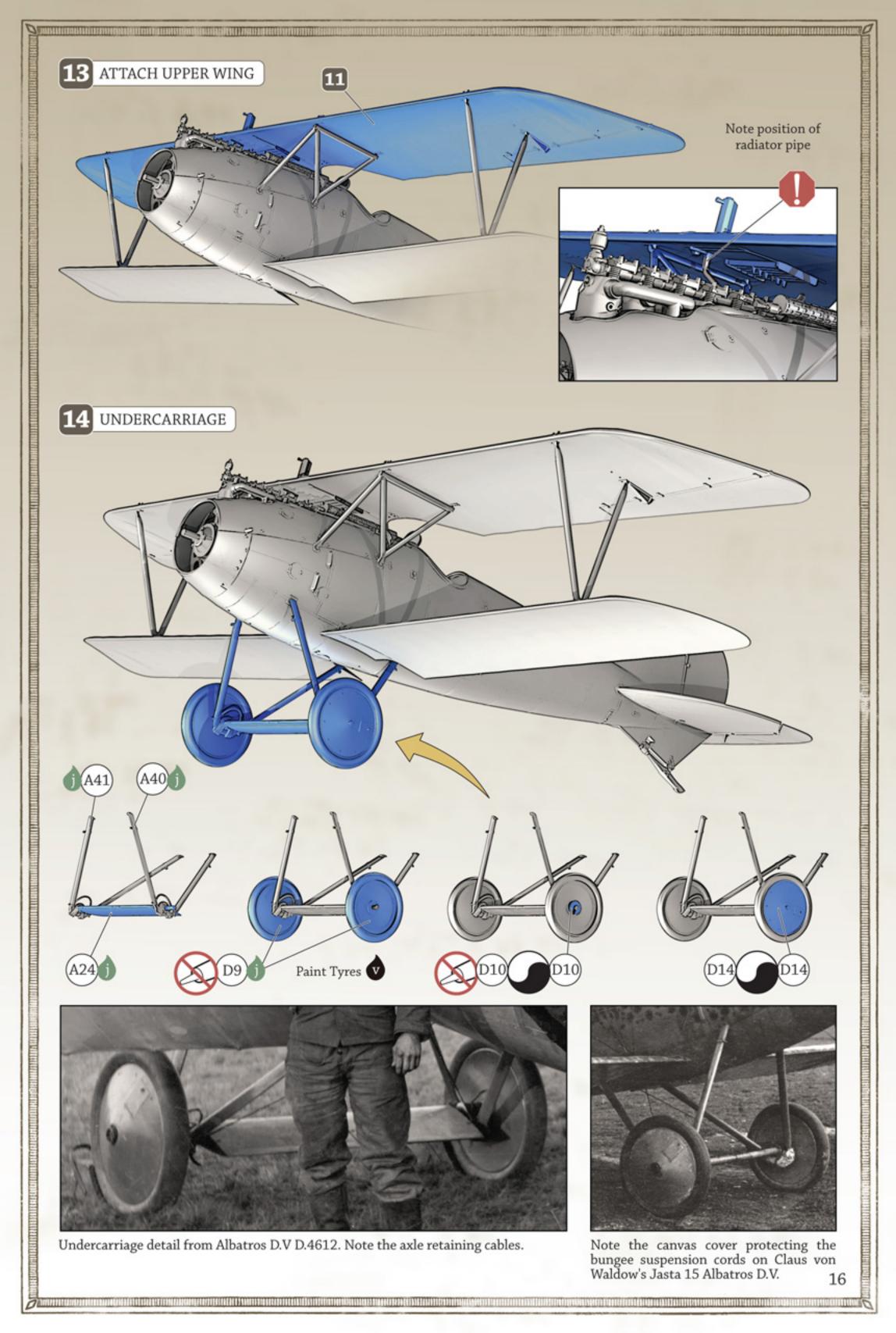
An unidentified pilot sitting in an early Albatros D.V. Note the head rest, LMG 08/15 empty belt chute fairing, aileron cables entering the upper wing and the unusual 'scoop' fixed under the radiator to aid cooling and multi coloured 4 point safety harness, possibly red and white.

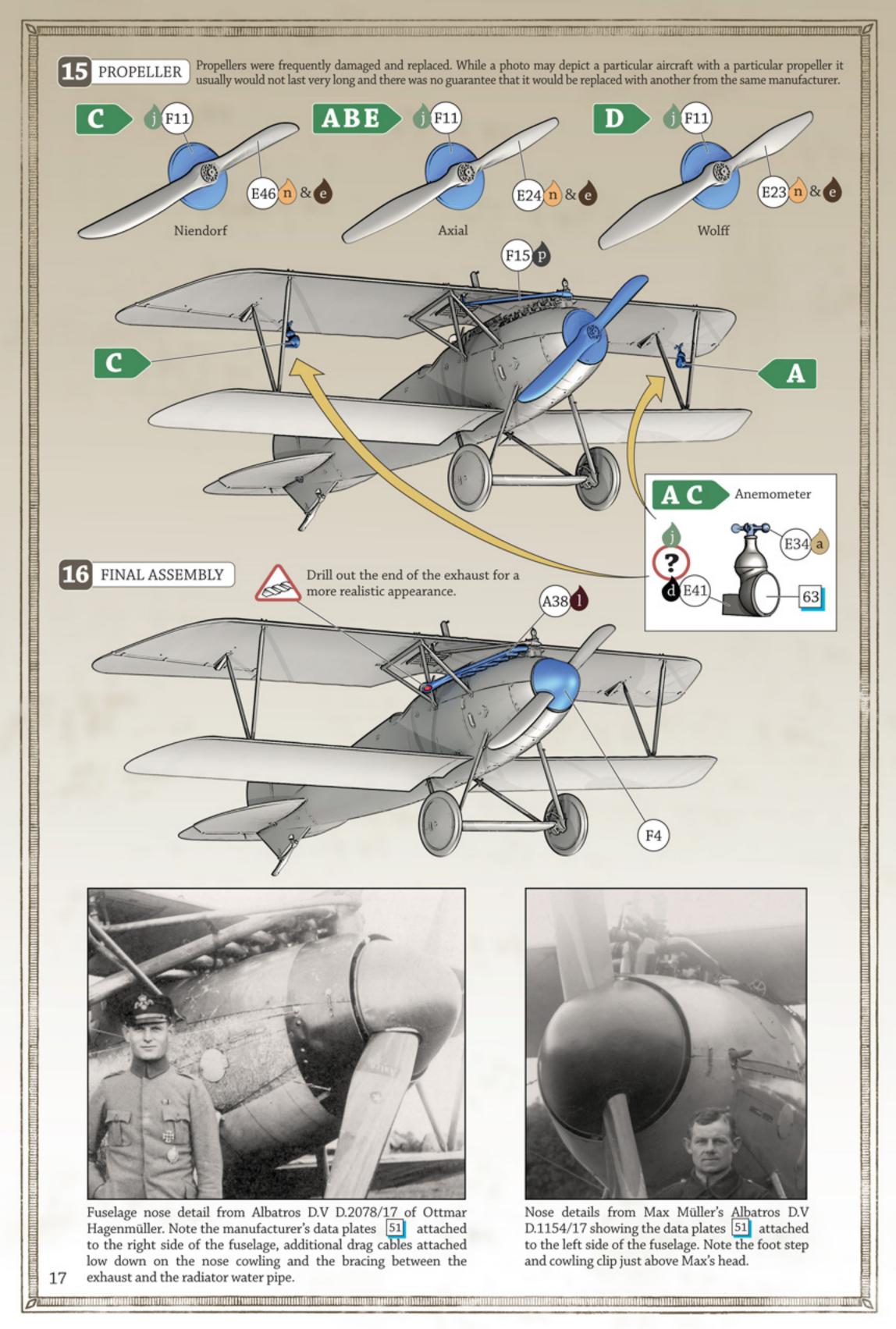
to its fullest.

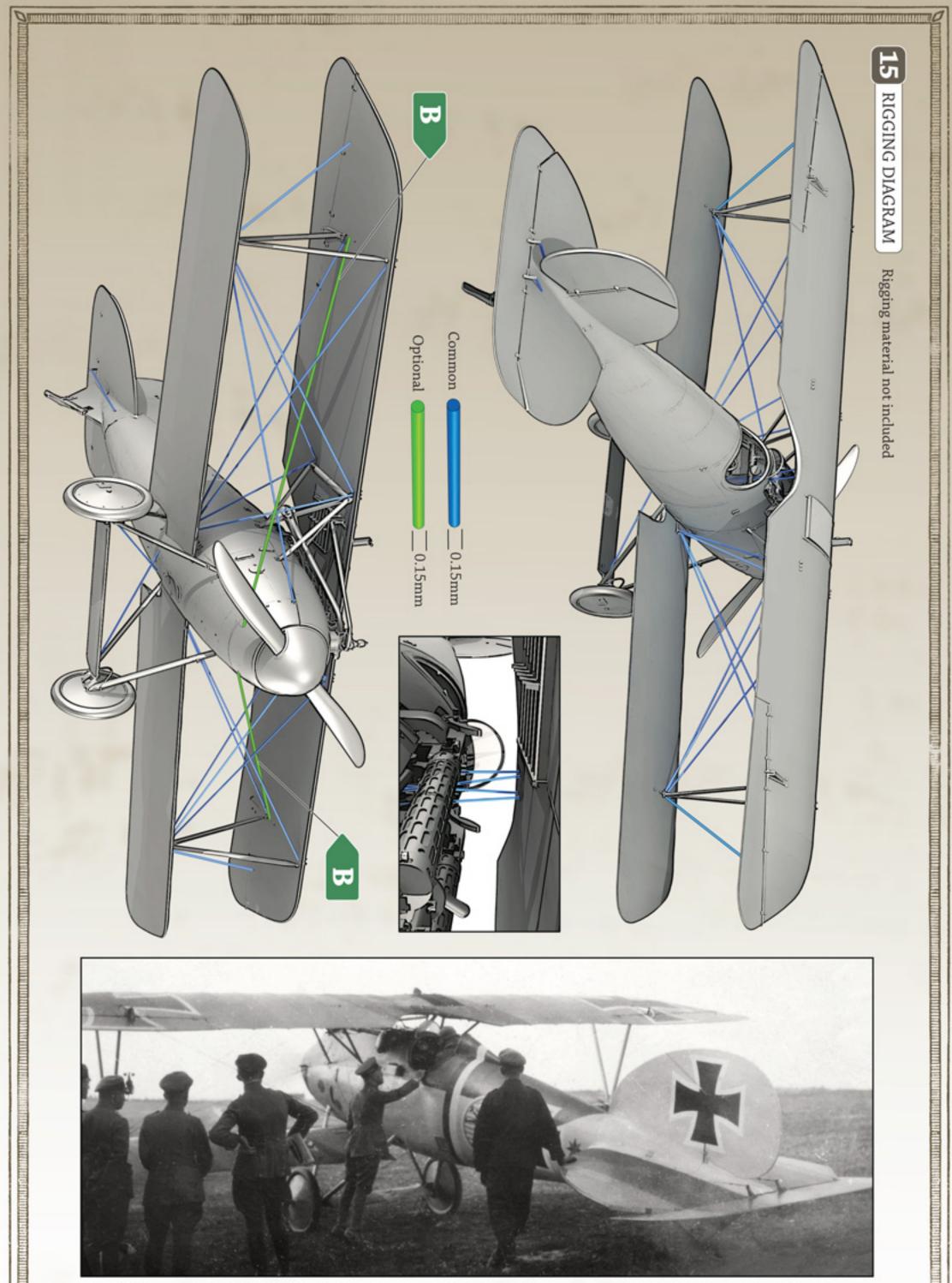


Albatros D.V D.1192. Note the Daimler-Mercedes radiator, headrest, green-mauve-green camouflage and shiny varnished plywood fuselage of this very new D.V.







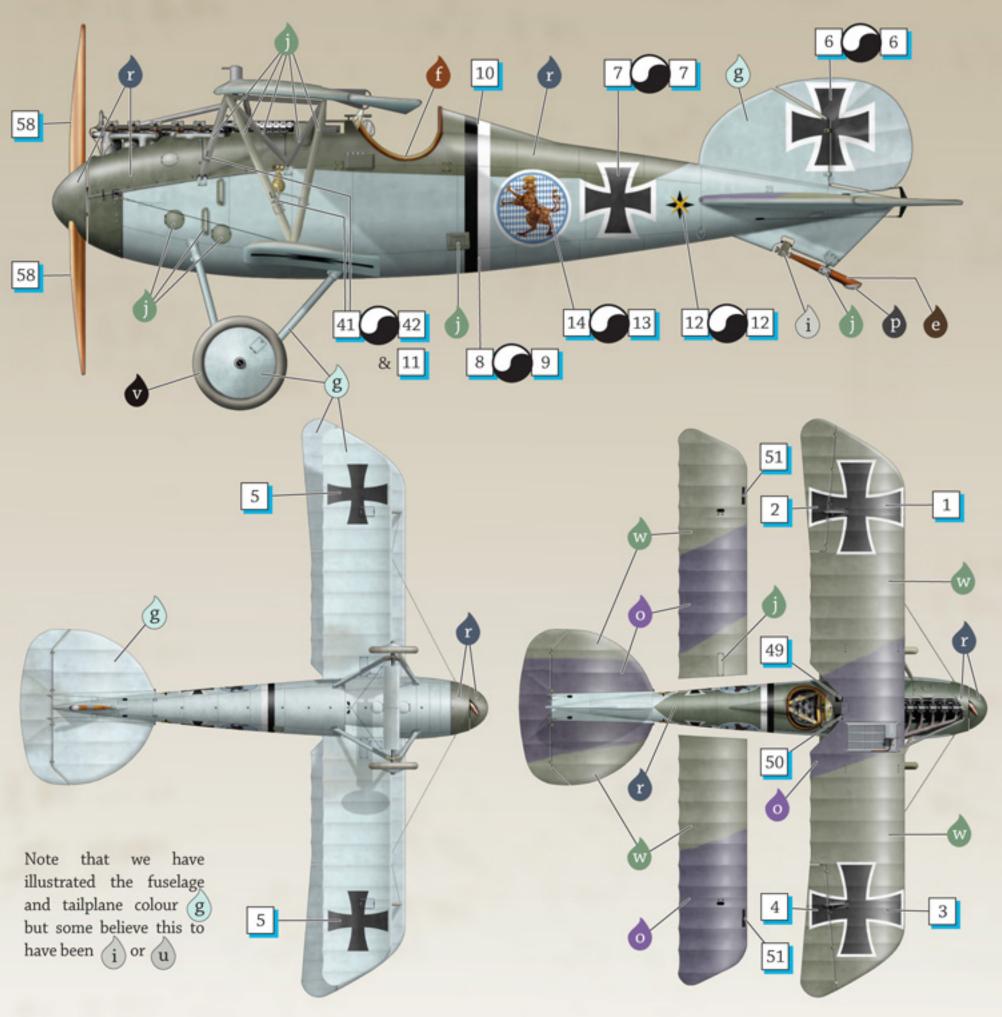


Eduard Ritter von Schleich prepares for take of in D.2034/17. Note the position of the upper wing crosses, strut mounted anemometer, flare rack and that the small scope seen in the following image has not yet been installed. Each half of the undercarriage axle wing upper surfaces appear to have been painted the same mauve and green as the wings. Schleich commanded Jasta 21 from 26 May until 23 October when he transferred to the Bavarian Jasta 32b and become known as "The Black Knight', with all subsequent aircraft finished overall in black. He survived the Great War with 35 victories and the Pour Le Merite "Blue Max' to his name, flew against the communists in 1919 and joined Lufthansa in 1920. In 1933 he joined the Luftwaffe and commanded various units before becoming General de Flieger in occupied Norway. He died on the 15th of November 1947 in a British POW camp. (Greg VanWyngarden photo)

PAINT COLOUR SCHEME AND DECAL GUIDE

Albatros D.V

A Albatros D.V D.2034/17, Eduard Ritter von Schleich, Jasta 21, Sept 1917 (35 victories)

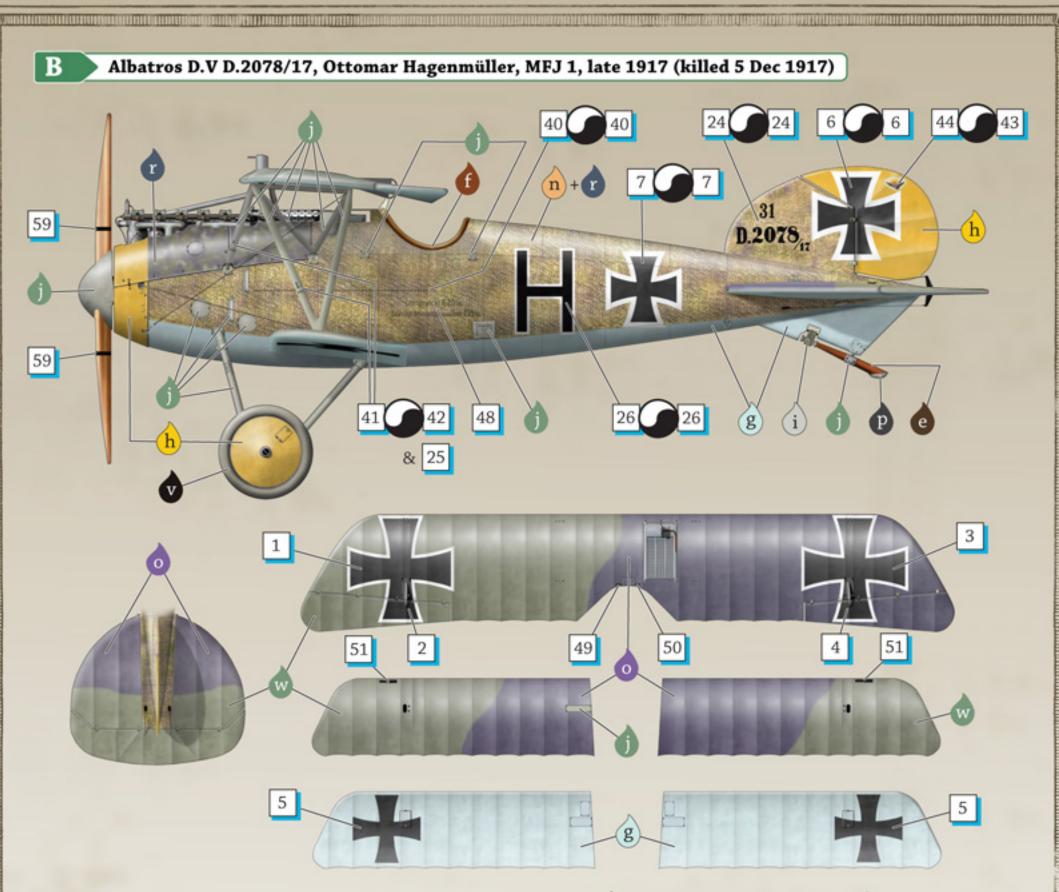




Eduard Ritter von Schleich strikes a famous poses beside the distinctive Bavarian lion personal marking on his Jasta 21 Albatros D.V D.2034/17. Note the small scope protruding through a hole cut in the windshield, the faired in rear view mirror to the right of the cockpit and the very dark (mauve?) appearance of the right wheel cover. The right side engine cowling panels appear to be recent replacements and are possibly unpainted aluminium.

(Greg Van Wyngarden photo)

<u>iraditata filo erretiona (dando da la 1876) in terra i sur indicadenta filo del 1813 il 187</u>

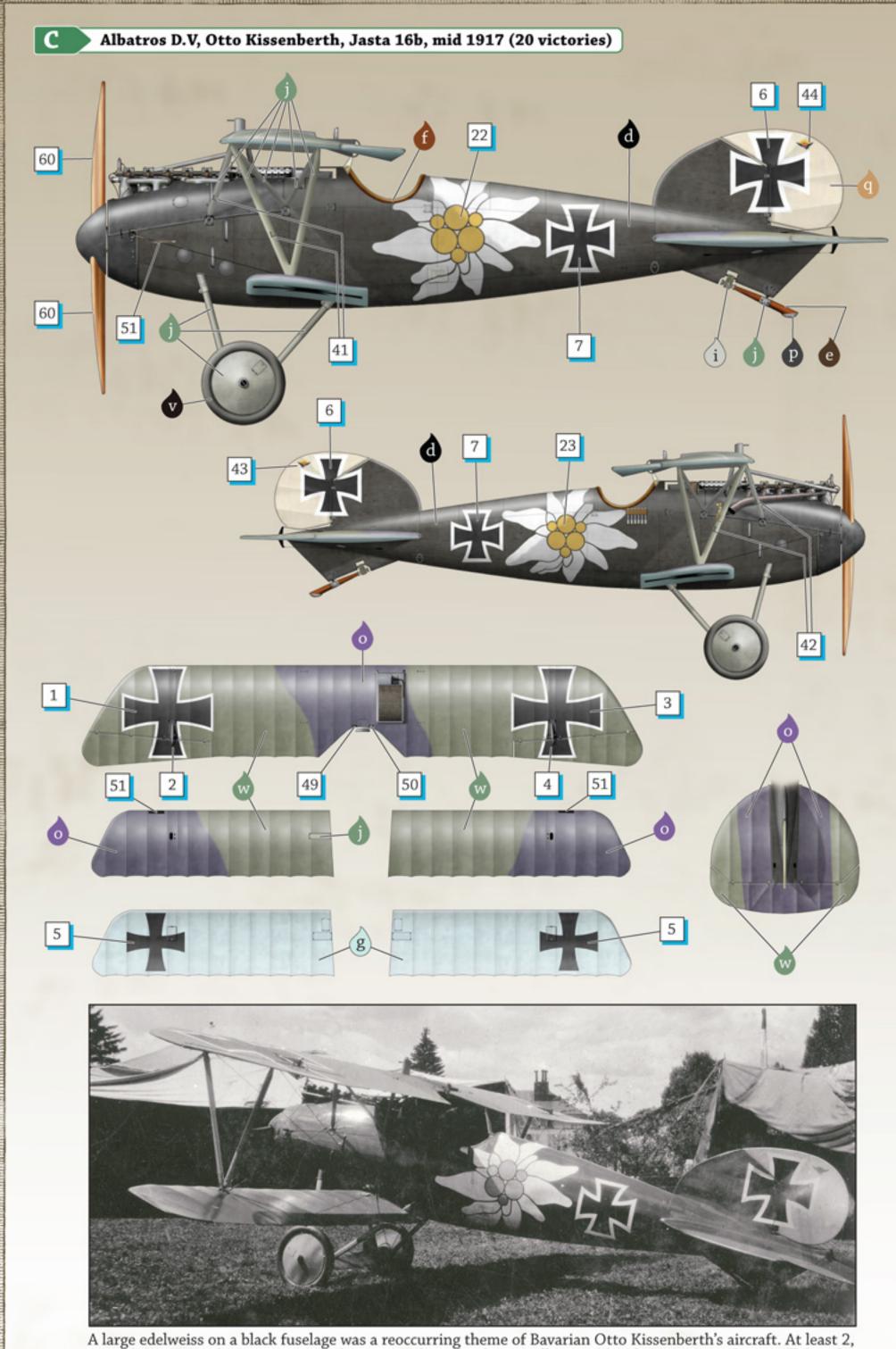


Note that we have illustrated the underside of the fuselage as g but some feel it could have been n.

Please see our website for hints and tips on replicating the 'loofa' sponge applied mottled camouflage.

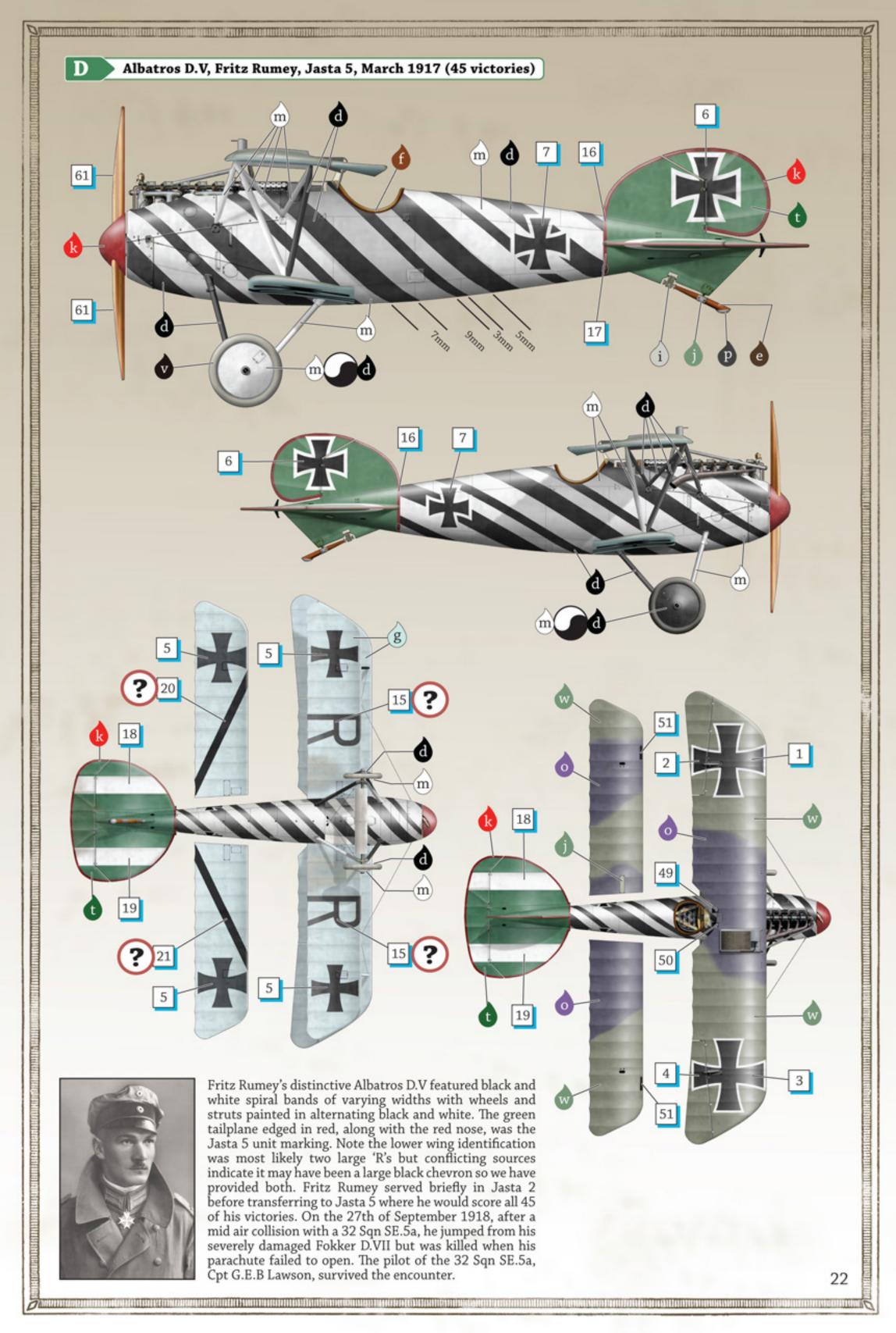


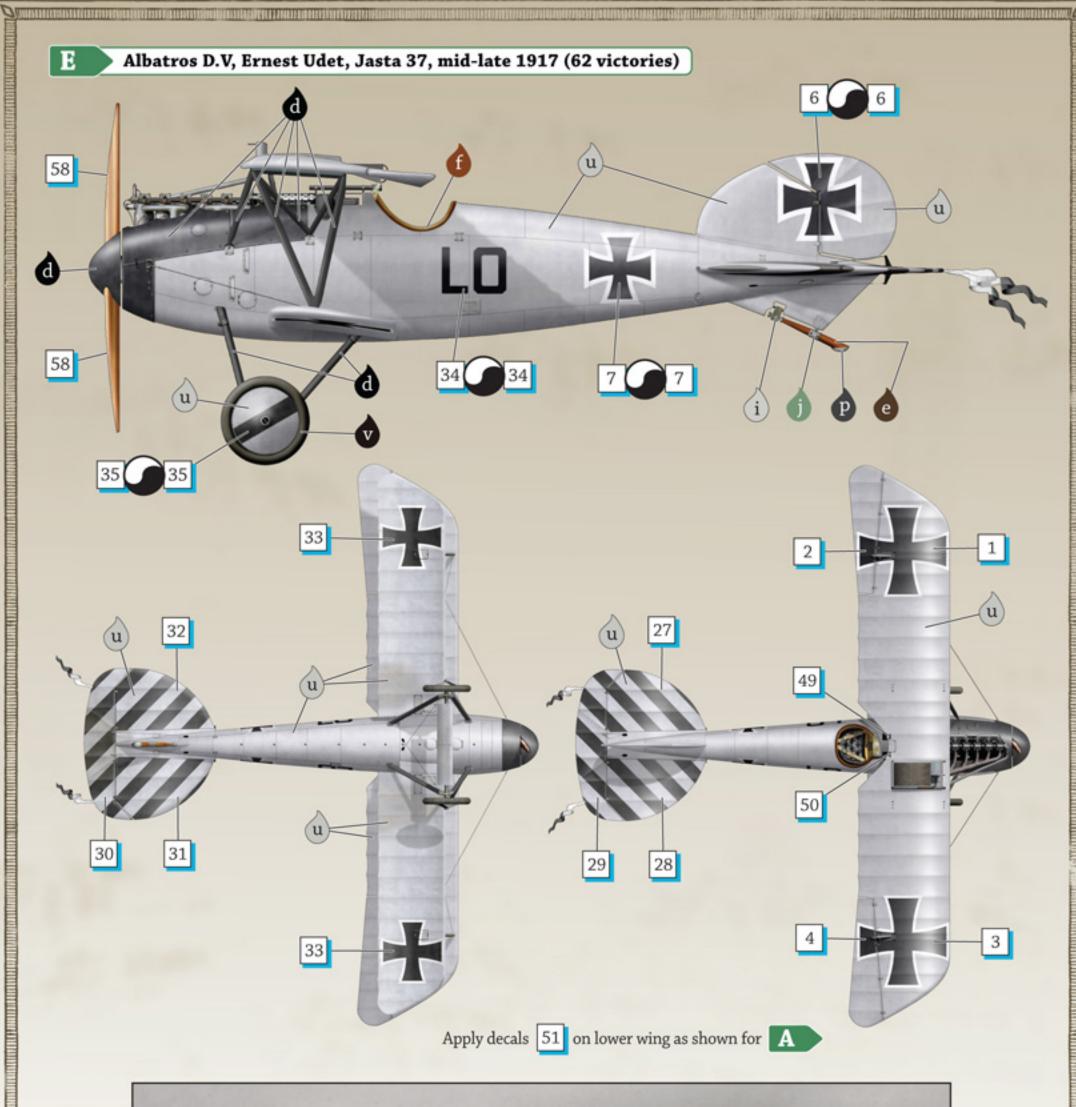
Albatros D.V D.2078/17 of Ottmar Hagenmüller from Marine Field Jasta 1 in late 1917. The orthographic film has caused the chrome yellow of the nose cowl, wheel covers and rudder appear very dark. The fuselage has had olive green camouflage paint dappled on with a sponge at unit level.



A large edelweiss on a black fuselage was a reoccurring theme of Bavarian Otto Kissenberth's aircraft. At least 2, possibly 3 D.Vs, at least 1 D.Va, a Pfalz D.IIIa and a Roland D.VIa all carried his distinctive markings. All, bar the D.Va, will be available from Wingnut Wings in due course, but if a photo emerges of his D.Va then we intend to make this available also. Note the additional bracing cable from the lower V strut attachment to the upper wing tips and safety harness strap hanging over the edge of the cockpit. Otto survived the Great War with a tally of 20 victories only to die in a mountaineering accident in August 1919.

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Ernest Udet's Albatros D.V caught in flight displaying its all over silver grey finish and Jasta 37 tailplane stripes. The Fuselage letters LO are a referral to his fiancé Eleonore Zink. Udet ended the Great War with a tally of 62 victories and went onto a colourful career between the wars as an international stunt pilot and playboy. He joined the Luftwaffe before WWII and served in an administrative role until November 1941 when he committed suicide.



^ Max Müller poses in front of his Jasta 28 Albatros D.V D.1154/17 in this photograph dated 1st August 1917. Reportedly Max had his aircraft re-painted differently every fortnight to confuse the enemy. Note the large M under the lower wing.

 $^{\vee}$ A nice diorama idea as ground crewmen prepare Albatros D.V D.4640/17 for flight at Mariakerke. Note the 180ps Daimler-Mercedes D.IIIa engine, additional drag cables and rigging guide fixed to the side of the fuselage.





An unidentified pilot wrapped up for protection from the elements prepares for a flight in this early Albatros D.V. Note the headrest, placement of the flare pistol and the dark appearance of the varnished wooden fuselage. All metal fittings remain





^ Uffz Tybelsky's Jasta 19 Albatros D.V D.2104/17 serves as a backdrop for an informal photo opportunity for airmen, visiting dignitaries and a pair of dachshunds.

< Karl Haustein poses for a photograph in his well camouflaged Jasta 37 Albatros D.V. Other than the mottled camouflaged paint and the missing 'LO' this aircraft is finished pretty much the same as Ernest Udet's aircraft shown on page 23. Note the small air pump indicating the 160ps Daimler-Mercedes D.III engine, flare rack and safety harness draped over the rear of the cockpit. This aircraft also has additional drag cables to strengthen the wings.

> Alwin Thurm's Jasta 31 Albatros D.V 2058/17 features an interesting reptilian camouflage scheme which has been carried from the fuselage onto the paler green areas of the wings. Note the headrest identifying this as an early production D.V, the Daimler-Mercedes radiator and 160 ps engine. The caption to this photo reads 'Uffz Alfred Dübler Alb D.V 1916 (or 1920)', unfortunately neither date is really appropriate for this scene and no further information about Alfred Dübler has come to light so far.





Albert Dietlin's Albatros D.V D.4612/17 in all its glory at Jasta 41. Note the flare pistol, rigging diagram fixed to the left side of the fuselage and missing empty belt chute fairing. Albert Dietlin achieved 9 victories before he was shot down and killed on the 12th of April 1918. He was nearly 28.



3-D Modelling by Mark Miller

A background in technical illustration and long term passion for modelling and early aircraft has enabled Mark to produce some of the most stunning 3D renderings of aircraft anyone is likely to see. His artwork has appeared in

numerous books and publications from Cross & Cockade, Over the Front, Schiffer and Windsock amongst others.

To see some examples of Mark's work please visit http://www.wwi-models.org/Images/Miller/render/index.html



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.



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



32009	1/32 Albatros D.V	Qty
0132009A	A parts	1
0132009B	B parts	1
0132009C	C parts	1
0132009D	D parts	2
0132009F	F parts	1
0132009P	Photo-etched metal parts	1
132E0005	E parts Merc D.III engine	1
7132009	Instructions	1
9132009	Decals	1



32013 - 1/32 Sopwith Pup RFC



32015 - 1/32 Albatros D.Va



32016 - 1/32 Sopwith Pup RNAS

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