

The RAF FE.20. The Boyal Aircraft Factory Farman Experimental 20 was a mild update to the FE.2. Thus Confer which first few in January 1015. Like other Royal Laircraft Excitory designs of the time the FE.2 made good used many of the shelf components from their other designs, most noticity that use of the BE.2 ouger wing panels and experimental BE.2 does understrained with a most wheel. He was a supervised of the second of the second

Despite is ungainly appearance and large size the FE.25. For was an effective to we set fighter, recommissione and bomber aircraft which proved to be highly adaptable to the changing face of acrial sustant, entries just a 1915 to be pushed estign affected the observer/games are excellent view and field of fire (comerling that its contemporaries the BE.2. Ke were corely lacking) enabling the FE.20, along with the DFL2, to contain the Tolker accounty from decimating the FE.71 alon loss services in the ecoret, recommission, bound effective to the DFL2, to contain the FE.20 along with the DFL2, to contain the property of the property of the PE.20 along with the property of the PE.20 along the PE.20 along with the property of the PE.20 along the

Early production FE2bs arrived at a time when cannothage was only just being introduced to they featured many experimental cannothage possible. Last production FE2bs arrived well after the standard colour scheme of PC10 upger surfaces with dear deeped lines (CE10) beers surfaces although replacement wing apands in all ower CD1, were commonplace. Night bending operations required as covered in the contract of th

 Wite graph
 Length
 Max Weight
 Max Seeds

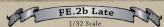
 47 9 (14.55m)
 31 9 (9.68m) Late undercaring
 Approximately 3000b (1500kg)
 9.5mph (447sph)

 No. manufactured:
 Production:
 Fingine:
 Cilling:

 1200 (acreco) in broulds 5 equ(7) 1915 to Nov(7) 1918
 120m & 1500b beardnoor
 100 (3550m)

Armament: 1 or 2.303 (7.7mm) Lewis guns and over 350lb (160kg) of bombs.

Schedule of Spars Parts for the FE.2B Machine, DCGETS R.7392 1050 10.18, 1018 - The Vintage Aviator Ltd 1914-18 Aviation Heritage Trust: R. AR FEED Windocked Ltafalle, Mi Bruce, 1980 - The Royal Aircraft Entroy FEED/d & Variants in RFC, RAF, ENAS & AFC Service, various authors, Cross & Cockade International, 2009 FEED FEED Again, various authors, Athatros Publications, 2009 - Private Collections



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.

Painting

If installing rigging please drill out all location holes with a 0.5mm drill bit to a depth of at least 1mm.

Only use paints suitable for plastic model kitsets. Cut out each decal as required. Soak in warm water for 15 seconds. Slide off backing paper onto gloss Decals: 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.

















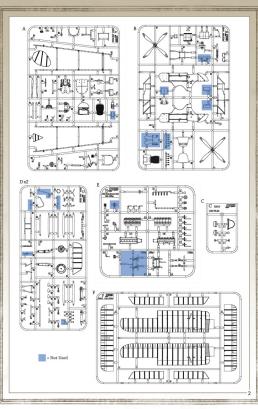


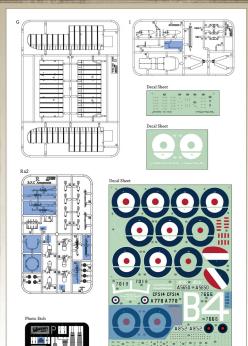




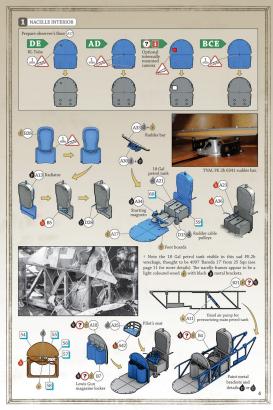
	All colours	Tamiya	Humbrol	Misterkit
a	Brass	X31	54	
ь	Copper	XF6	12	
	Gun Metal	X10	27004	
d	Aluminium / Tin	XF16	27001	
	Steel	XF56	27003	
f	Dark Yellow - matt	XF60	74	
g	Rust	XF9	113	
h	Leather - semi gloss	XF52	62	
	Clear Doped Linen (CDL) - semi gloss	XF55	121	BC05
	Black night camouflage - matt	XF1(x15) + XF15(x1)	33(x15) + 61(x1)	
	PC10 Late - matt	XF62(x2) + XF10(x1)	98	
	PC10 early - semi gloss	XF62	155	BC03
m	Light Grey	XF19	64	
	White	XF2	34	BC08
	Dark Wood* - semi gloss	XF68	98	
Р	Black - semi gloss	X18	85	
q	Rubber - matt	XF69	66	
	Light Wood* - semi gloss	XF78	93	
s	Red - matt	XF7	60	
t	Dark Grey - matt	XF24	112	
u	Green - matt	X28	208	
v	Clear red	X27	1321	
w	Clear green	X25	1325	

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





HILLIANDE



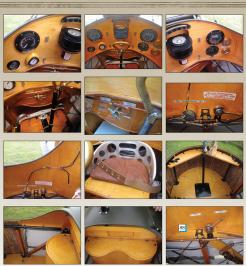




Cockpit detail from the beautiful TVAL. The Vittage Avistre Limited: prepared to carry FE.2b 6341 with pilot's locker under the seat (an option not used in this model). Seat and control column detail showing location of decal [80], note that the 4 point Statton Harness shown here is one of the very few 'modern' items installed for askety reasons. The tusual safety belt was like the wide waist belts we include in this model [40] & F@. Instrument board detail from destroyed FE.2b 4997 showing subtle differences to TVAL 6341.
 Note that this instrument board appears to have been painted a very dark grey or PC10 colour.

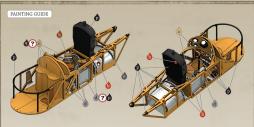
^ TVAL 6341 instrument board, although representing an earlier type not fitted with

representing an earlier type not fitted with the additional 18 Gal petrol tank (22) under the pilot's seat, many details are still pertinent for this model. The 4 metal brackets either side of the compass are to secure a curved map holder often seen on early machines.



Interior detail photos from TVAL FE.2b 6341. While some details of the 'Pilot's Locker' cockpit arrangement are not suitable for this model, many interesting details can be seen in these photos.



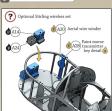


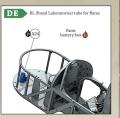




Ransomer, Sim & Jeffrie built FELD B 1939 was completed in October 1937 and served with 100 Spn as night bember from November that year. It had just 20 hours Hippig incide when the value it in besit to its coin on a February 1319 with 08 Sowar and 164 Holding Clark being made 1707, German crosses painted over the white circles under the bottom wings indicate that it may have been floom (and reduced to its present condition) by its new owners. The redder carries the seefal number in whiter(2) while there is a vertical shatfor? Due not to a present condition by the seefal number in whiter(2) while there is a vertical shatfor? Due not not the contraction of the seefal number in whiter(2) while there is a vertical shatfor? Due not not the contraction of the seefal number in whiter(2) while there is a vertical shatfor? Due not not the seefal number in whiter(2) while there is a vertical shatfor? Due not not the seefal number in white a present in the seefal number in white a result in the seefal number in the see

3 NACELLE PULPIT OPTIONS





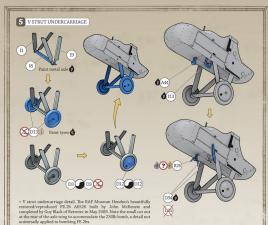




0.15mm

Nacelle detail from RAF built early production FE-D6 5431 showing that, at least for some aircraft, the doped on linen soe section lining was unpainted. The exposed metal and wood framework both appear to have been painted a very dark grey of colour while the floor and unmerous makeshift 25 Sqn fittings (not relevant to this model) appear to be unpainted wood.







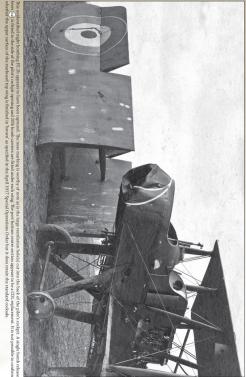


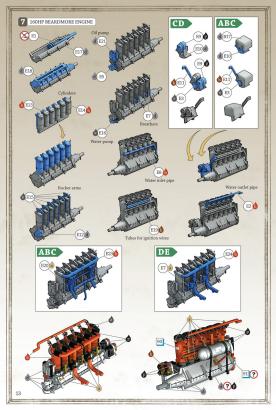
Severely damaged after crashing into a street this FE.2b. thought to be € 8.1 Weir built 459? 'Baroda T? completed in February 1917, displays the No.10 ML1. Anderson rear mount ② ± ⊙ and front No.4 ML1. Saveling mount ○ ⊙ with its 3 clips [□] located on the top fairing support table ②.]
All Bates and WA Barnes of 25 Say were on a bombing operation in FE.2b. 4997 when they were shot down and leight by Manfred won Richthoften on





G & J Weir built FE.2b A5548 served with 64 Sqn and 51 HDS (Home Defense Squadron) and is recorded as flying at least 2 "Anti-Zeppelin Patrols"; the first in September 1917 and the 2nd in August 1918. In this photo it appears to have a 120hp engine with 2 bladed propeller, holt landing flares and lights as well as 20lb bomb carriers.







Beardmore engine #708 from FE.2b 7705 as seen on page 20 showing earlier style of 'Y' intake manifolds (22) seen on 160hp engines.



showing later 'T' style of 160hp intake



Note the oil pump (22) at left.



The same engine after a few hours flying time. Note the extensive oil staining and patina of the copper water jackets and intake pipes (E24) and the protective magneto cover (817).

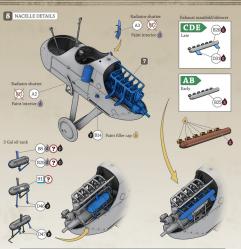


Rear right view showing the position of the oil tank (88) & (821) under the late style silencer (826) & (031).



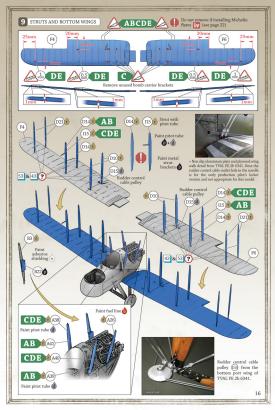
Top view showing the rocker arms, water outlet pipe and cyl water jackets before being mounted into TVAL FE.2b 6341.

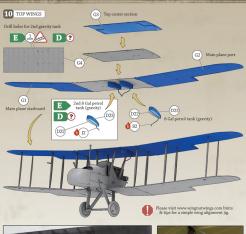






Silencer and 3 Gal oil tank detail from TVAL FE.2b 6341. Archive images indicate that the tin plated oil tank was often unpainted. Note the asbestos heat shielding wrapped around the rear strut (83).



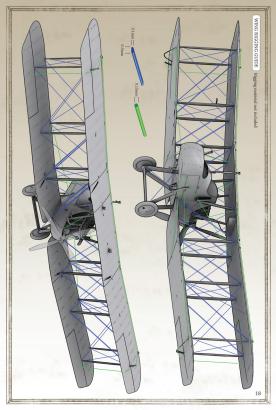


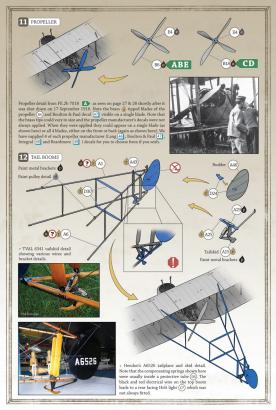


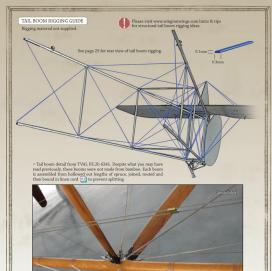


^ 8 gal petrol tank detail from TVAL FE.2b 6341 painted a green PC10.

• This unidentified crew stitle a pose beside their FE.2b while an air mechanic pumps up the fuel pressure before flight. Note the sunlight shining through the translucent CDL top center section, the remaining wing panels appear to have their upper surfaces finished in an opaque (PCIO') dope. Like many later FE.2bs the magnetos do not have their protective cover (iii) fitted.

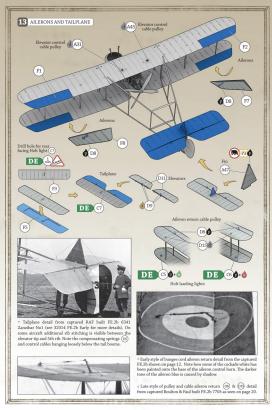








Boulton & Paul Duilt FE. 2D / 705 was on recommassance escort with 25 Sqn when it was lost in compact on 2 February 1917, failing to the guns of Jasta 18 Paul Bona. RT Whitney and TG Holly were made POW. The allerons feature cable returns as opposed to the earlier sprung bungee type.







NACELLE BOMB CARRIER RIGGING GUIDE

Rigging material not included.









nexploded 2010 HALE DOMO.







230lb HE RFC bomb Mk.1 fitted to its 230lb Bomb Carrier single Mk.1 under Hendon's FE.2b A6526.



Unexploded early 112lb HERL bomb still attached to its 'Carrier 112lb Single Mark II'.





has a single Lewis Mk.II (R19 fitted with a 97 round magazine R21 and Mk.II collector bag (D1) or (D2). In this case the Lewis gun also has illuminated night sighting equipment fitted. Note the single bomb release lever (3) fitted to the side of the pilot's cockpit and the pilot's windscreen (3). This machine appears to have suffered an unusual bird strike consisting of some baby booties and a small fluffy duck.

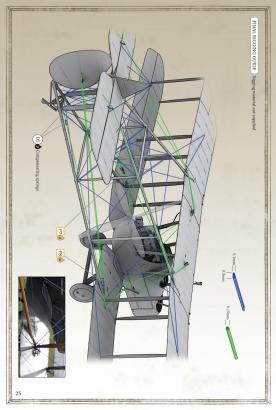


Lewis Mk.II gun (R15) fitted with a 97 round drum magazine (R21).







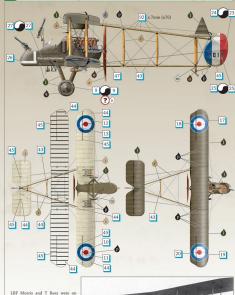


age. Comprete in April 216, the Locking early and the 1916 when it was returned to England. The aluminism(?) @ Re red(?) [In] bands around the all boons appear to be a combination of additional wrapping to protect the booms from propeller debris and a warning to ground crew. This detail is not seen on all FE 20s.

> FE.2b 6372 is an early RAF built machine which was test fitted with 'V' strut undercar• This unidentified night bombing FE.2b white circles under the bottom wings of adulty painted centers). Holt flares with a shades, 'Michin parachute flare rails an additional wind driven generator fitted ut he nacelle. The raider serial number is legible but the 2nd and 3rd digits are '82'.





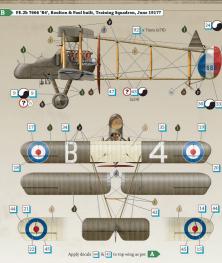


FE.2b 7018 'Punjab 32 Montgomery', Boulton & Paul built, LBF Morris & T Rees, 11 Sqn, September 1916

bombing escort duties in the 11 Sqn PE.2b 7018 "Punjab 32 Montgornery" on 17 September 1916 when they were shot down by Manfeet on Richthofen to become hist credited victory. Rees the gunner was killed in the action and Morris was fatally wounded and died after being made POW. The shatered pilot's windscreen ⊘ is testament to the carrage.







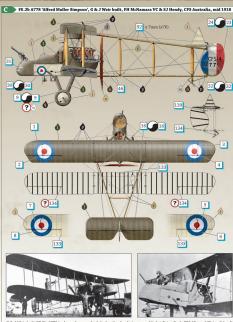
Boulton & Paul built FE.2b 7666 'B4' is seen here after it was crashed into trees in a British village, possibly by a trainee pilot, on 27 June 1917. Completed in August 1916 7666 was with 11 Sqn when HH Turk & J Allen shot down a LVG C type and an Albatros scout on 12 October. On 27 December JB Quested & HJH Dicksee shot down a 'Neiuport' (presumably, one would hope, captured and flown by the Germans. Or, perhaps more likely, this would have been a SSW D.1 an almost direct copy of the

before

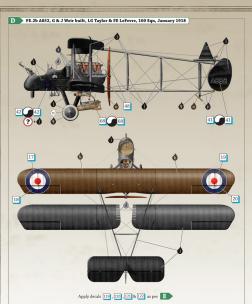


themselves being shot down and crash landing behind allied lines, wounding Dicksee. After being rebuilt 7666 was flown back to fingland and served with 19 TS (Training Squadron). Note the CDL center section of top planes and repainted 866° portion of the serial number on the left side of the rudder. No photo showing 7666 in 11 Sqn service is known to us but if you wish to depict your moded as such we recommend using the same arrament options as #

Nieuport

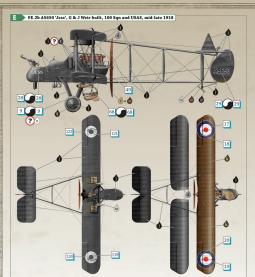


G & J West Juli F E.D. A 2778 is shown here on the left showiny after being assembled at Point Cook CS (Central Pring School) in Vertoria Australia was due to a gift by Mirded Mailler in Vertoria Australia was due to a gift by Mirded Mailler Simpson from Parksids, South Australia of E.J.250 for the purchase of a Bastleplane.' The cost of a fully equipped Fiz. Ba at the was sa 3,173 and the balance was paid for by the government. In April 1918 the possibility of a German sepalum carrier operating off the Victorian coast became known and Fiz. Da A778 (now additionally marked CFS14) was dispatched on reconsulasance in the beyof coast; the related in the photo on the right was exc partly MeMonana VC running up the engine while WO 3.1 feeth prepage hinself for take off in the exposed objectively papte on 20 April 1918. Note the Level Mail. (193) with 67 round managine (20) and 10 4541 Sirverling mount (20). The blue of the nacion clouds it conjugate the size of the conjugate of the confidence of the confidence



G & J Weir hulf EE, 26 ASC2 was completed in early 1917 and served with 100 Sqn in the night bombing pile. Items to note includes a directly flat the does providing below the native [No.10] Mel. Inderson near mount. (a) * Gbl although only a single Lewis Mel.1 gan is carried on a No.4 Mel. Swivelling mount (a), Held Harse (C) and landing lights (a) * Gbl although only a single Lewis Mel.1 gan is carried on a No.4 Mel. Swivelling mount (a), Held Harse (C) and landing lights (a) * Gas and landing lights (a





G & J Weir-buil FT.25 ASSO 19e4 was completed in July 1917 and served with 10.0 Spn from February 1918 as a specialized gright bember until 1 save replaced by a Indelley Psgn (2400 in July 1, at which time ASSO shows sold to the US Government. Photos of ASSO confirm it was firted with twin 6 Gd gravity petrol tanks and had "ses' painted on the port side of the macelle. As it not confirm if twas firted with twin 5 Gd gravity petrol tanks and had "ses' painted on the poor side of the nacelle. As it not confirm if 'See' was repeated on the starbands side of the nacelle. As it not formed if 'See' was repeated on the starband side of the nacelle. As it night III thus (200 and lights (3) & (3) were fitted to the bottom wings. The black fittish has weathered considerably and in much faded.

» FE.2b ASS72 displays one interpretation of bottom wing white circles as specified in the Special Operations Order. This 101 Sqn Fee was lost while night bombing on 21 September 1917 and, despite the carnage wishle here, the crew of AC Hatfled and RR Magregor were reportedly captured alive probably a very fade blake or oark grey, with the serial number appearing even darker, red or fresh black.





This unidentified night bombing FE.2b appears to have had white circles painted on the side of the nacelle and an attempt has been made to overpaint them with black(?), which has failed. Empty bomb carriers are fitted under the wings and nacelle and the Holt flares have 'lamp shades' fitted. A mascot of some sort has been fixed to the front of the nacelle.



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

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 curacy 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,



longer accepts commissions.

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

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 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 ma 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

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

time of day of an actual battle.

Historic aircraft photos courtesy of the 1914-18 Aviation Heritage Trust and Colin Owers (unless credited otherwise).



32025	1/32 FE.2b Late	Qty
0132014A	A parts	1
0132014B	B parts	1
0132014C	C parts	1
0132014D	D parts	2
132E0010	E parts Beardmore/AD Engine	1
0132014F	F parts	1
0132014G	G parts	1
0132025I	I parts	1
0132014P	Photo-etched metal parts	1
132R0001	R parts RFC Armaments	2
7132025	Instructions	1
9132014b	Decals	1
9132025	Decals	1
9132025Ь	Decals	1

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



32003 - 1/32 SE.5a 'Hisso'



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



32013 - 1/32 Sopwith Pup RFC

Also available from www.wingnutwings.com

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