

WINGNUT WINGS



The unique Gotha UWD seaplane was developed from the Gotha G.1 land plane and although only one was ever built, the highly distinctive twin engine Gotha UWD is nevertheless important because it helped set Gothaer Waggonfabrik on the path to building the more conventional seaplanes and bombers that they became famous for. The aircraft that would serve as the prototype Gotha G.1 was designed by Oskar Ursinus (the founder and editor of Flugsport magazine) to the German Army's Type III aircraft specifications of a 200hp, 3 seater able to fly at over 120kph and carry 450kg for up to 6 hours. Ursinus proposed the idea of building his Kampfflugzeug (battle plane) to FEA 3 commander Major Friedel in August 1914. The distinctive high fuselage allowed the two 100hp Daimler-Mercedes D.1 engines to be placed as close together as possible to minimize yaw effects should one engine fail. Construction began the following month utilizing Flieger-Ersatz-Abteilung 3 (FEA 3) personnel and the Friedel-Ursinus Kampfflugzeug "FU", having now been given the serial number B.1092/14, took to the air at the end of January 1915. The high position of the partially armoured plated fuselage offered great visibility but provided little protection to the crew in the event of a nose over crash. Additionally the fuselage design was considered weak and it was considered to be underpowered. After further evaluation and minor changes "FU" B.1092/14 was sent to the eastern front for operational trials.

The license to build the "FU" Kampfflugzeug was allocated to Gothaer Waggonfabrik in March 1915 and incorporated many changes including 160hp Daimler-Mercedes D.III and 150hp Benz Bz.III engines, nearly equal span wings, bomb carrying capacity, wheel control column and a modified tailplane. The initial production orders for 6 Gotha G.1 land based aircraft and 1 Ursinus Wasser Doppeldecker (UWD) seaplane were placed in April 1915. To facilitate transport by rail, the fuselage could be disassembled into 3 sections which did nothing to help with structural rigidity. There would only be 18 Gotha G.1 built in total because the fast progressing development of combat aircraft meant that it was considered obsolete shortly after entering service in July and almost all of them had been retired from front line service by February 1916. The UWD was one of several different twin engine seaplanes ordered by the Navy to fit their requirements for a long range reconnaissance and torpedo carrying aircraft. The sole UWD was completed in late December 1915 and given the Naval serial number 120. UWD 120 initially featured an upside down tailplane but this is conspicuously absent from photos taken during its testing at Warnemünde in January and February 1916, having now been re-installed the "right way up". The UWD was described as easy to fly, able to take to the air with ease and was smooth on landing. Sometime after passing its testing phase, UWD 120 had a "proboscis" bomb dropping tube fixed under its nose, additional windows installed and balanced ailerons fitted. There is currently no evidence to suggest that UWD 120 was ever used to carry a torpedo. Gotha UWD 120 was used to bomb the English coast during 1916 and continued to serve the Navy until it was written off in a crash on 2 October that year. Any history of this interesting aircraft here is of necessity very brief, therefore we encourage you to seek out the references mentioned below for a more thorough understanding.

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. Photographic evidence shows that the fuselage linen, wings and tailplane of the UWD was opaque (not translucent) and appears to have been finished in all over field grey. The wooden nose and floats appear to have been painted with a black bituminous tar based transparent varnish for protection. The cockpit top coaming and rear section of the fuselage appear to have been finished similarly, although these may have simply been overpainted with a darker version of field grey. All metal brackets, cowlings, panels and struts appear to have been painted a very very light grey, almost white colour. The interior wooden parts appear to have been darkly varnished. The various camouflage schemes applied to German aircraft of the Great War have attracted more than their fair share of debate over the years and, while we have been as meticulous as we could be, I'm sure some will not find our choices to their liking and impassioned debate will continue to rage on amongst modellers.

Richard Alexander 2019

Wingspan: 20.1m (66ft)	Length: 14.2m (46.6ft)	Max Weight: 2552kg (5626 lb)	Max Speed: 137kph (85mph)
No. Manufactured: 1 (one)	Production: 1915	Engine: 2x 160hp Daimler-Mercedes D.III	
Ceiling: 3700m (12000ft)	Armament: 1x LMG 14 Parabellum gun and up to 160kg (353 lb) of bombs		
References:			
Gotha G.1 Windssock Datafile 83, PM Grosz 2000 - Colin Owers - 1914-18 Aviation Heritage Trust - The Vintage Aviator LTD Private Collections			

Gotha UWD

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



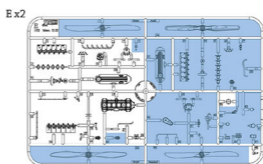
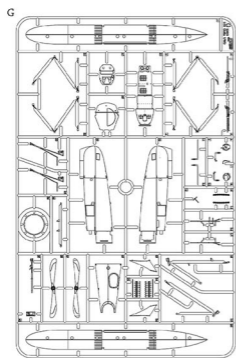
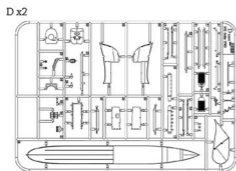
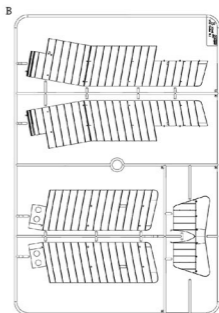
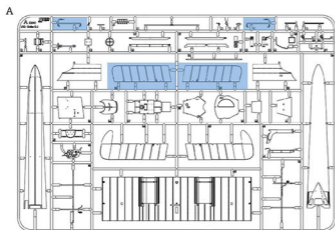
Other Side



Paint Colour

	All colours	Tamiya	Humbrol	Federal Standard
a	Brass	X31	54	
b	Gun Metal	X10	27004	
c	Aluminium	XF16	27001	
d	Black - semi gloss	X18	85	
e	Dark Wood - semi gloss	XF68*	64*	30111*
f	Leather - semi gloss	XF52	62	30219
g	Very Light Grey - semi gloss	X2(x10) + XF19(x1)	22(x10) + 64(x1)	37722
h	Unbleached Linen - matt	XF57	121	30475
i	Rust - matt	XF9	113	20045
j	Field Grey - semi gloss	XF22	92	24159
k	Light Wood - semi gloss	XF59*	93*	33245*
l	Steel	XF56	27003	
m	White - semi gloss	XF2	34	
n	Grey Green - matt	XF76	-	24424
o	Red - semi gloss	X7	19	11350
p	Copper	XF6	12	
q	Grey Overpaint - matt	X22(x10) + XF19(x1)	92(x10) + 64(x1)	
r	Bituminous Waterproofing - semi gloss	X19	33(x1) + 49(x1)	
s	Dark Field Grey - matt	XF65	116	34159

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



Decals

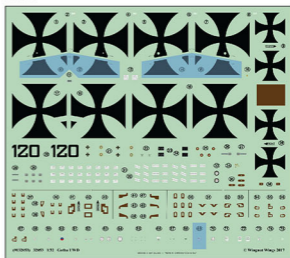
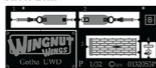
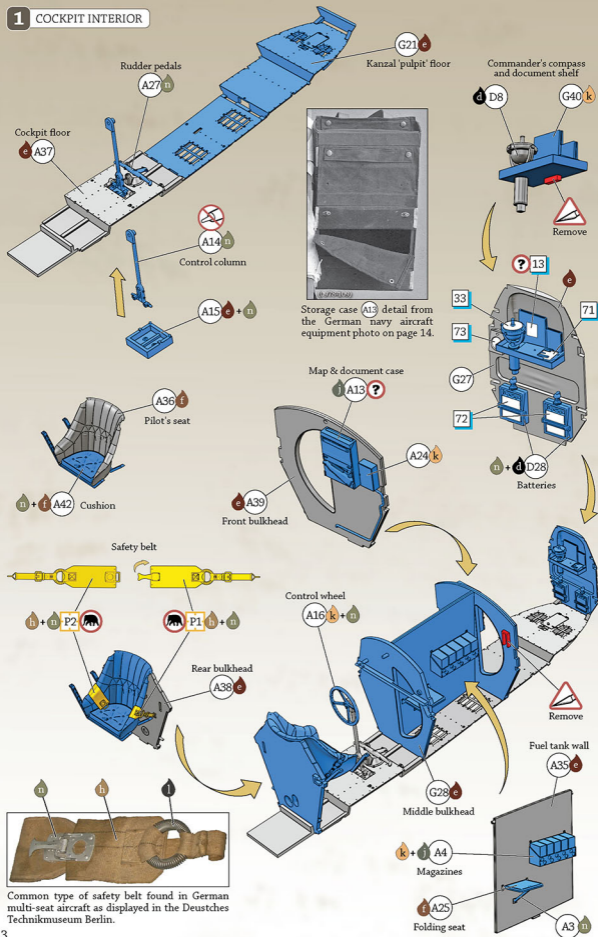


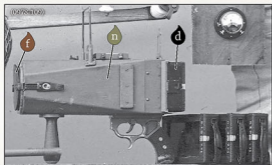
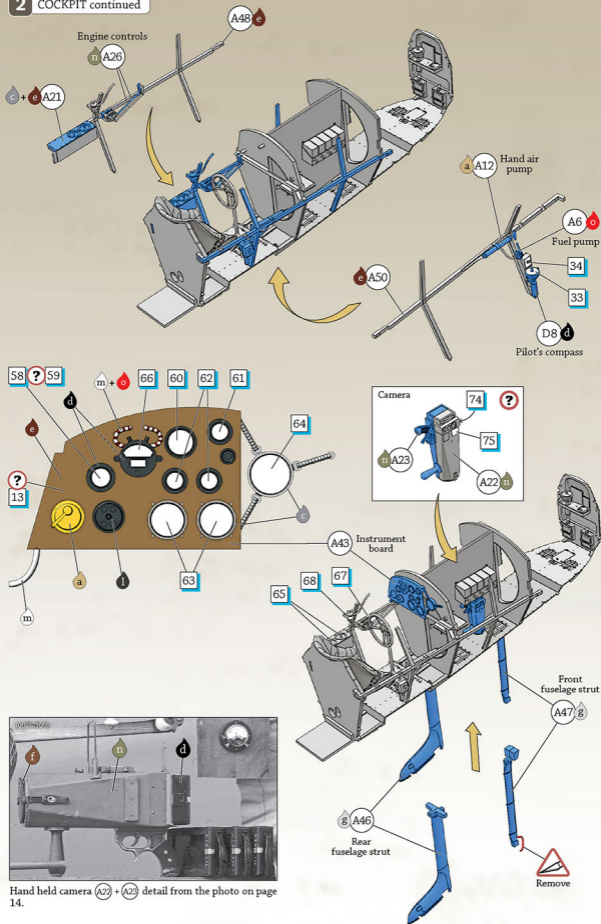
Photo Etch



1 COCKPIT INTERIOR

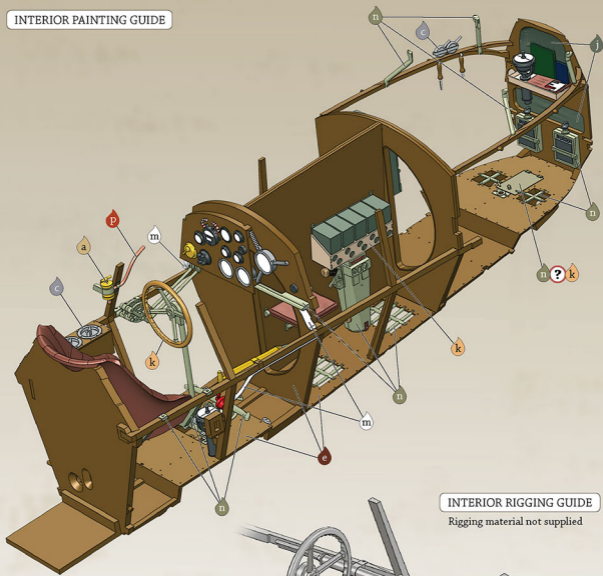


2 COCKPIT continued



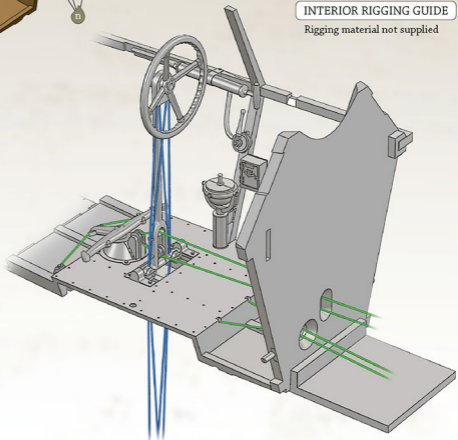
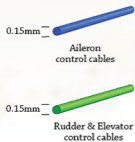
Hand held camera (A22 + A23) detail from the photo on page 14.

INTERIOR PAINTING GUIDE

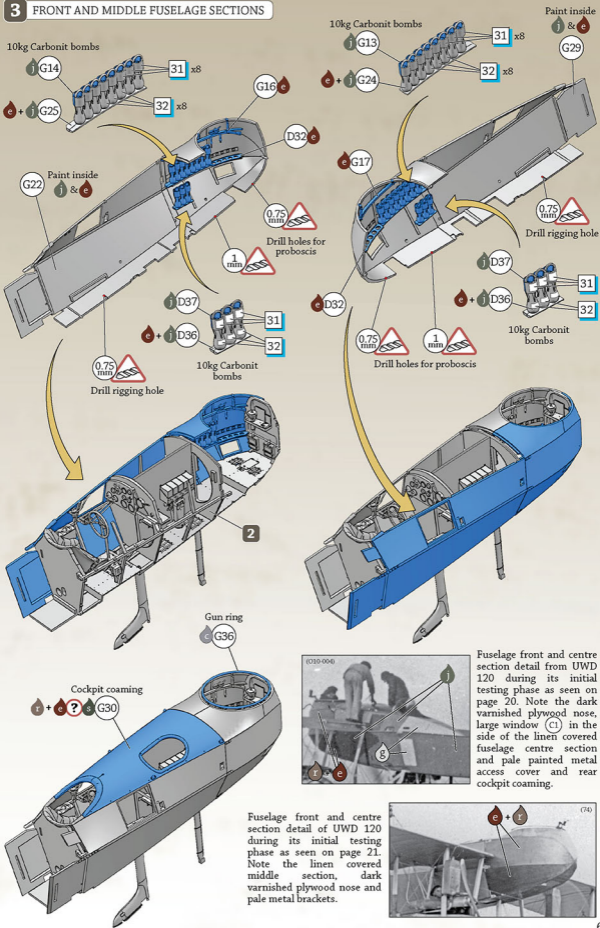


INTERIOR RIGGING GUIDE

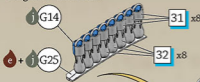
Rigging material not supplied



3 FRONT AND MIDDLE FUSELAGE SECTIONS



10kg Carbonit bombs



10kg Carbonit bombs
G13
G24
31 x8
32 x8
Paint inside
G29
j & c

G22
Paint inside
j & c

G16
D32
0.75mm
1mm
Drill holes for proboscis

G17
0.75mm
Drill rigging hole

0.75mm
Drill rigging hole

D37
D36
31
32
10kg Carbonit bombs

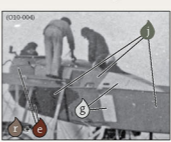
D32
0.75mm
1mm
Drill holes for proboscis

D37
D36
31
32
10kg Carbonit bombs

2

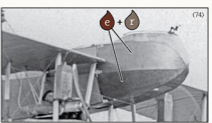
Gun ring
G36

Cockpit coaming
G30

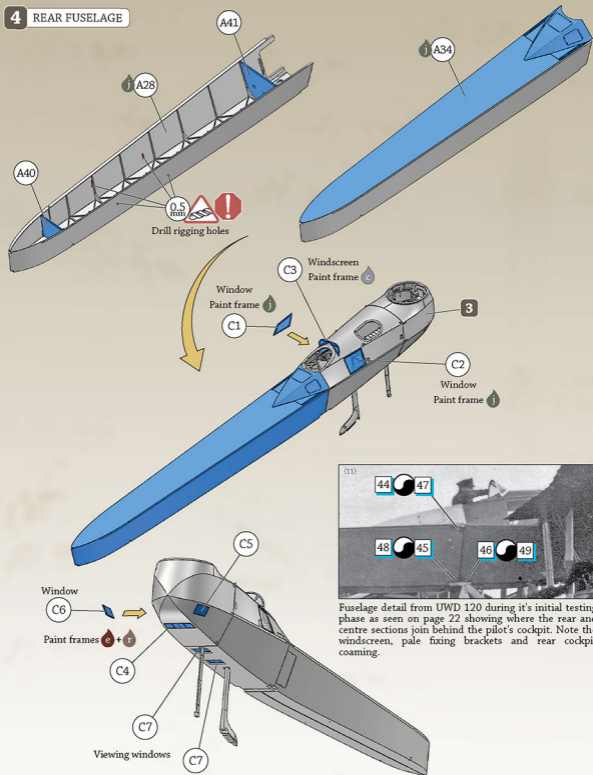


Fuselage front and centre section detail from UWD 120 during its initial testing phase as seen on page 20. Note the dark varnished plywood nose, large window (C1) in the side of the linen covered fuselage centre section and pale painted metal access cover and rear cockpit coaming.

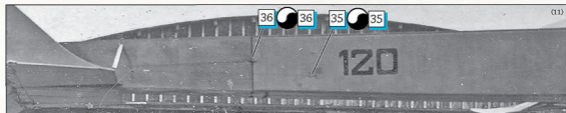
Fuselage front and centre section detail of UWD 120 during its initial testing phase as seen on page 21. Note the linen covered middle section, dark varnished plywood nose and pale metal brackets.



4 REAR FUSELAGE

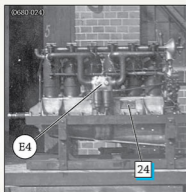
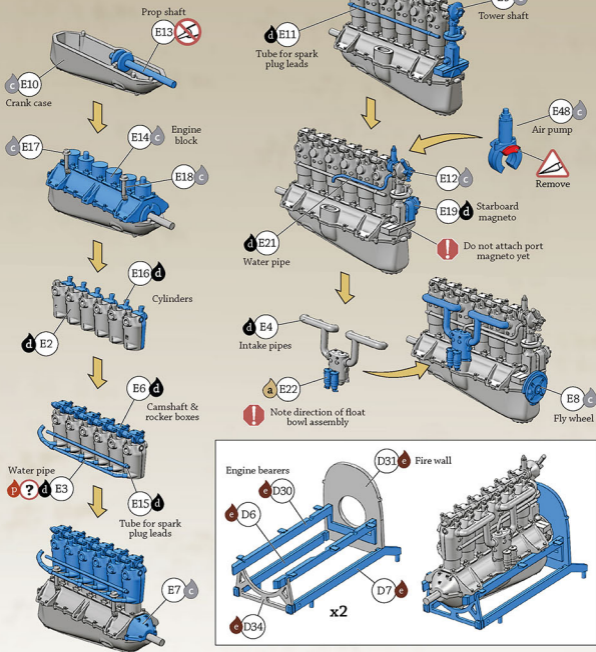


Fuselage detail from UWD 120 during its initial testing phase as seen on page 22 showing where the rear and centre sections join behind the pilot's cockpit. Note the windscreen, pale fixing brackets and rear cockpit coaming.

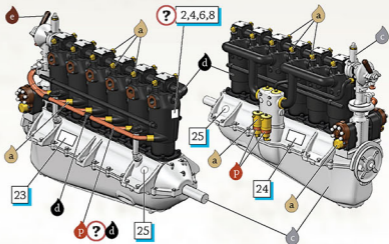


Rear fuselage from UWD 120 during its initial testing phase showing where the various sections join. Note the slightly different tones of the various sections of the fuselage.

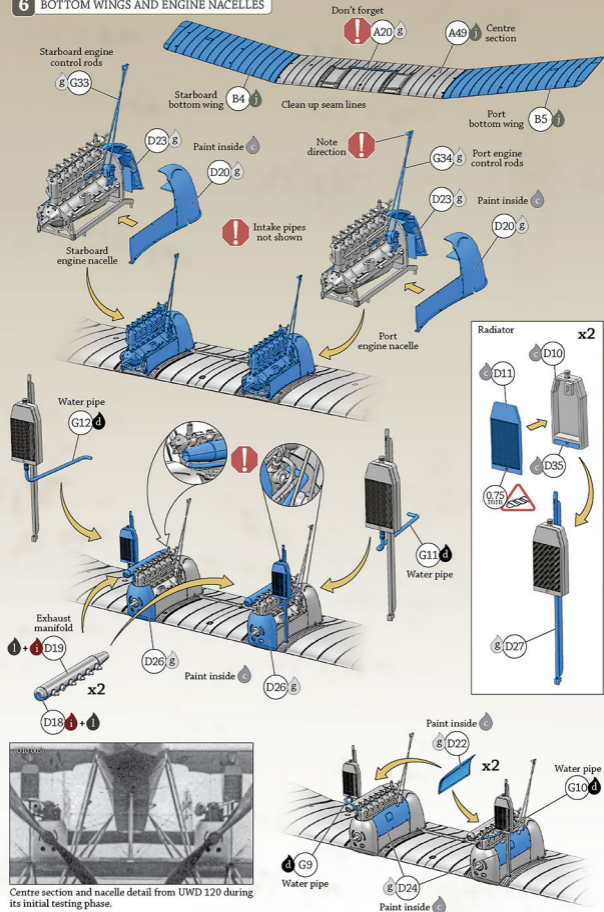
5 160hp DAIMLER-MERCEDES D.III ENGINE x2



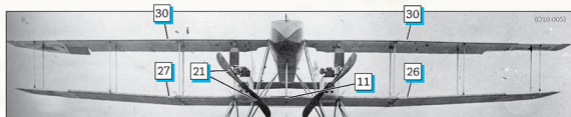
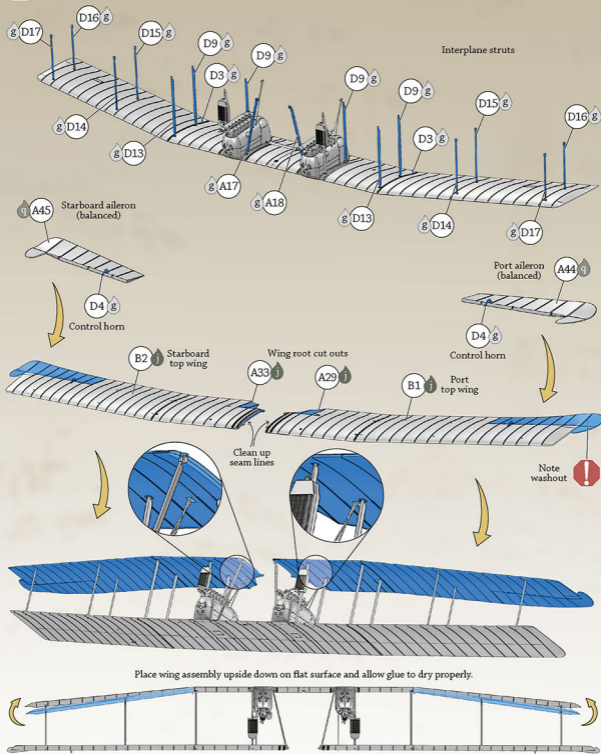
Early production 160hp Daimler-Mercedes D.III engine as used by Gotha UWD 120. Note the air pump at the rear of the camshaft.



6 BOTTOM WINGS AND ENGINE NACELLES

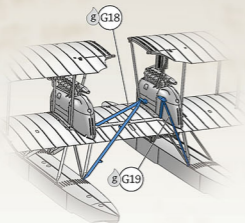
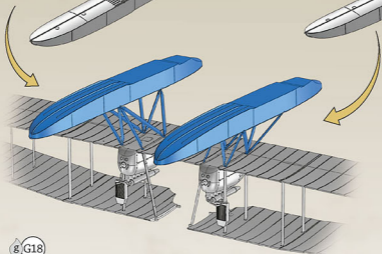
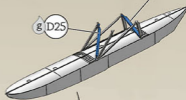
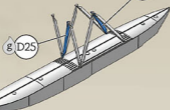
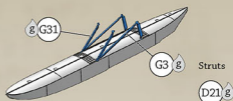
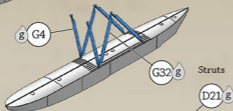
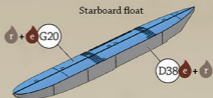
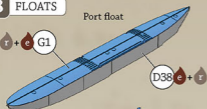


7 INTERPLANE STRUTS AND TOP WING



Wing detail from UWD 120 during its initial testing phase with the original unbalanced ailerons (A30 & A32). Compare the dihedral of the bottom outer wings with the horizontal top wings.

8 FLOATS

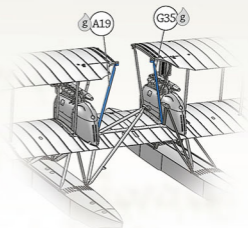


Float detail from UWD 120 during its initial testing phase. The floats appear to be dark varnished wood.

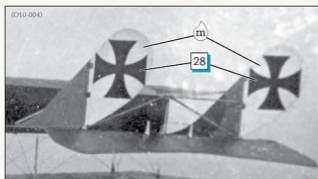
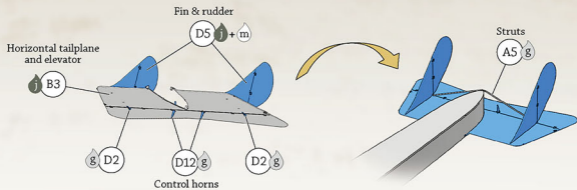
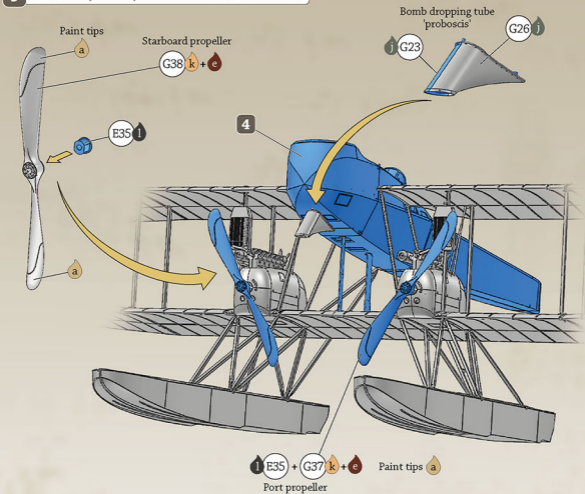


These struts are difficult to attach but do need to be assembled now.

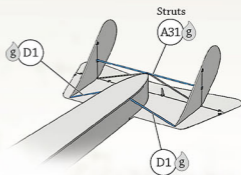
Centre section from UWD 120 during its initial testing phase. Note the complicated rear float to fuselage struts.



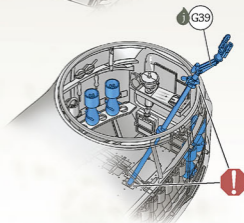
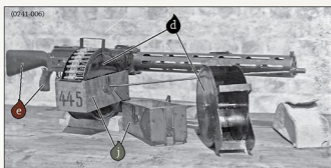
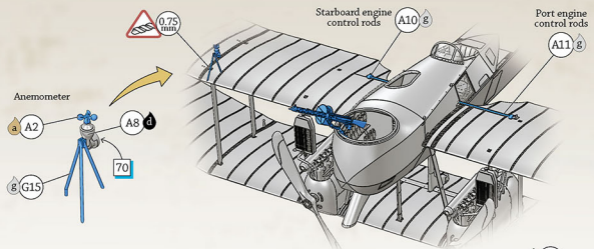
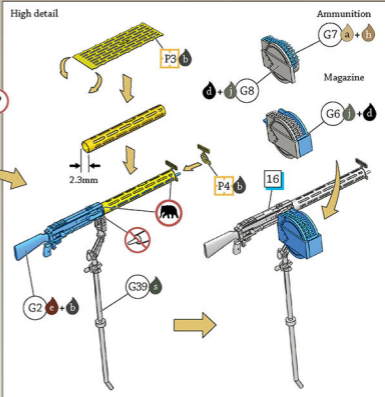
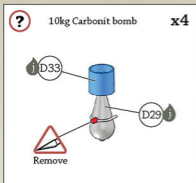
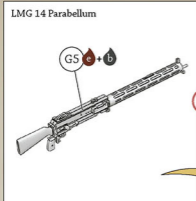
9 FUSELAGE, WINGS, PROPELLERS AND TAILPLANE



Tailplane detail from UWD 120 during its initial testing phase.

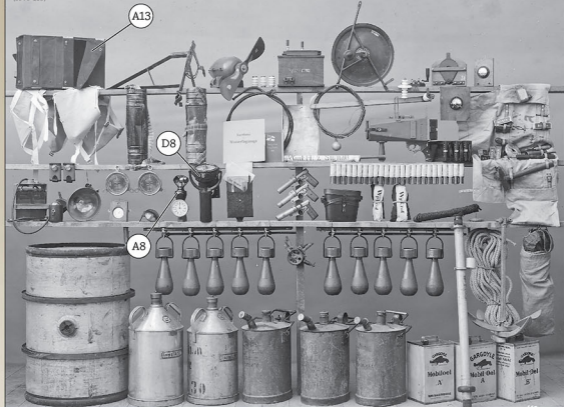


10 ARMAMENT & FINAL ASSEMBLY



LMG 14 Parabellum of the type carried by Gotha UWD 120 in March 1916. This particular gun may have come from LVG D.9W 445 (the D.9W was a seaplane version of the LVG C.1).

(0978-109)



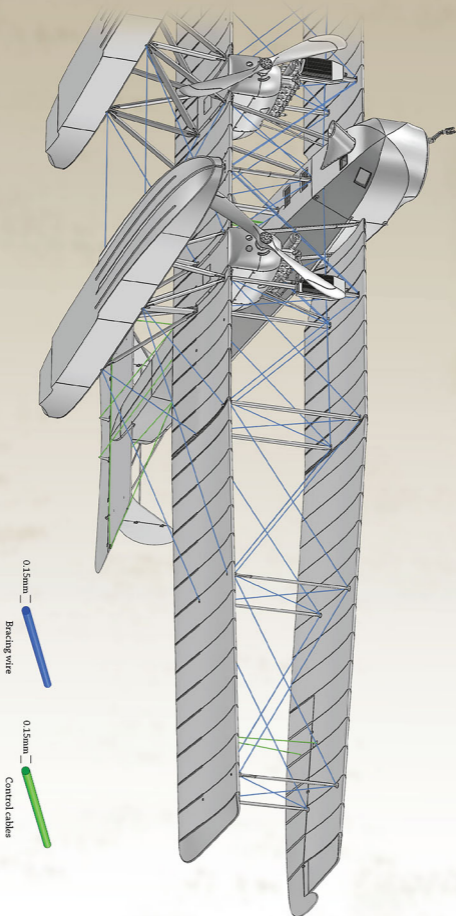
Some of the equipment that could be carried on German Navy aircraft in the Great War, only some of which would appear to be applicable to Gotha UWD 120. Note the fuel & oil cans, small bombs, flare pistols, tools, compass and binoculars etc.



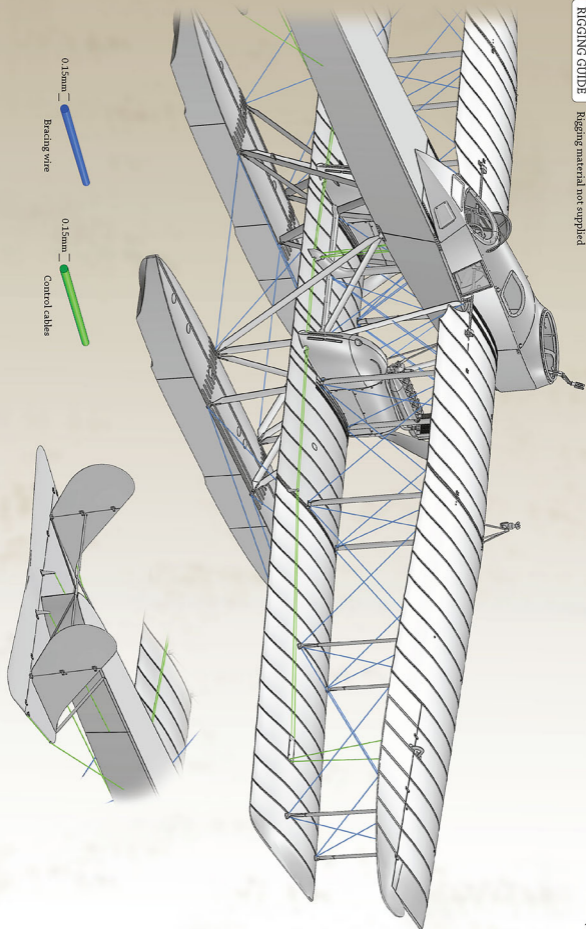
The original Oskar Ursinus designed Friedel-Ursinus Kampfflugzeug "FU" B1092/14 photographed in early 1915 in modified form with balanced ailerons and Hazet radiators to cool its 100hp Daimler-Mercedes D.1 engines. The unequal span wings, angled outer struts and tailplane are the most identifiable differences between this and the Gotha G.1.



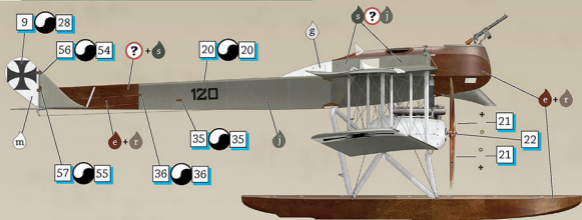
Gotha G.1 9/15 was the production prototype and first aircraft completed from the initial production order and is seen here at Fliegerersatz Abteilung 7 (FEA 7) in Koln in mid 1915. Note the twin core radiators, bomb dropping cage and IMG 08 "Spandau" armament. Although 9/15 was powered by 160hp Daimler-Mercedes engines like UWD 120, the remaining G.1 from the 1st and all 2nd production orders had 150hp Benz Bz.III engines.



If you choose to install the 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.



A2 Gotha UWD 120, See Flieger Abteilung 1, March 1916



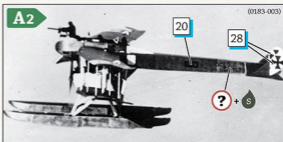
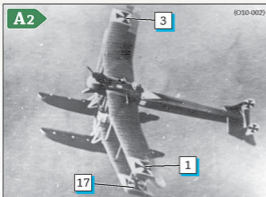
Gotha UWD 120 was the sole example of its type. It was ordered in April 1915 and delivered to the Navy testing facilities at Warnemünde in late December 1915 where it underwent successful trials in January and February 1916. It was modified with additional viewing windows, a "proboscis" bomb dropping tube and balanced ailerons in time for it to participate in a 6 aircraft raid on the English coast on 19 March 1916 which killed 9 civilians (including 6 children), 5 soldiers, and a chicken. Gotha UWD 120 remained in service until 2 October 1916 when it was written off in a crash.



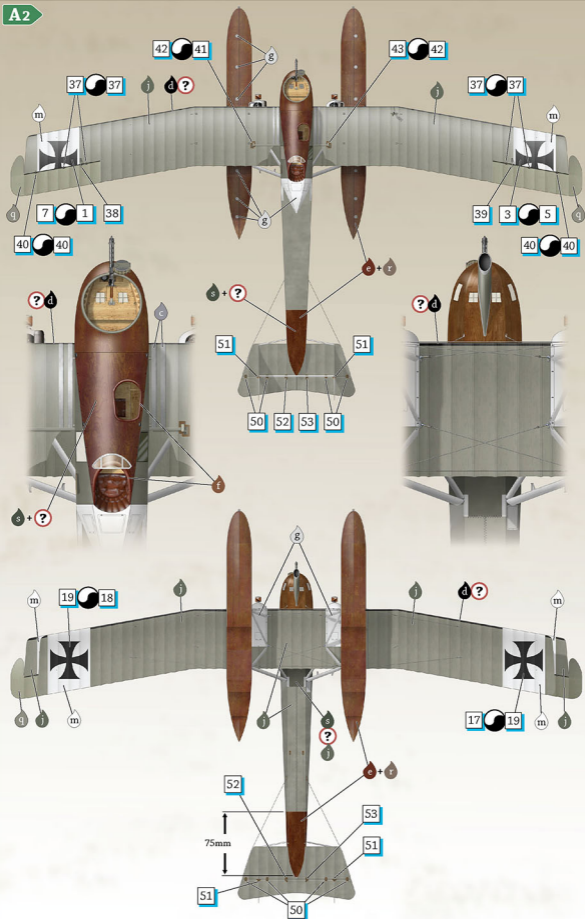
^ Gotha UWD 120 fitted with balanced ailerons and "proboscis" bomb dropping tube at Zeebrugge.

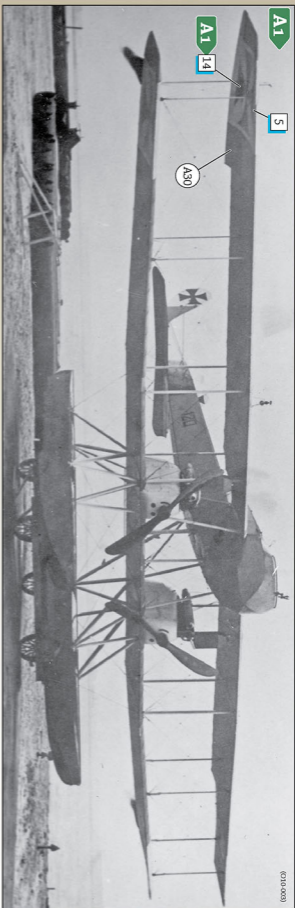
> Gotha UWD 120 is lowered into the water, perhaps on 19 March 1916. The "proboscis" is barely visible.

∨ Another photo of Gotha UWD 120 in flight. Note the lack of crosses on the recently fitted balanced ailerons.



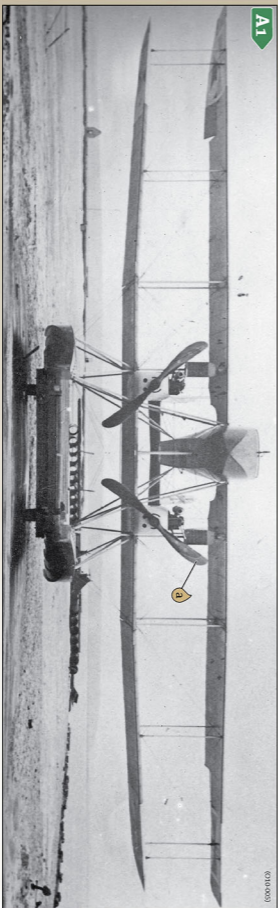
^ Gotha UWD 120 is shown here in flight, reportedly on its way to bomb the English coast on 19 March 1916. Note the window cut into the nose, "proboscis" bomb dropping tube and heavily discoloured rear of the fuselage.



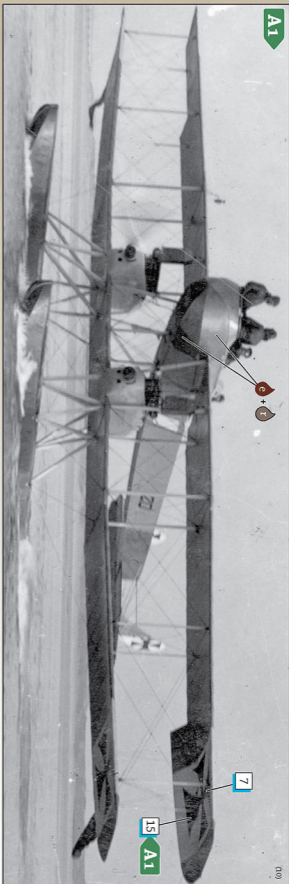


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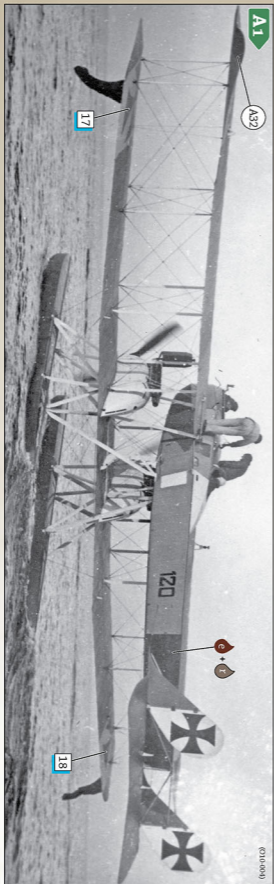
Gotha UWD 120 during its initial testing at Warnemünde in January 1916. Note the position of the anemometer and counter rotating Integral propellers.

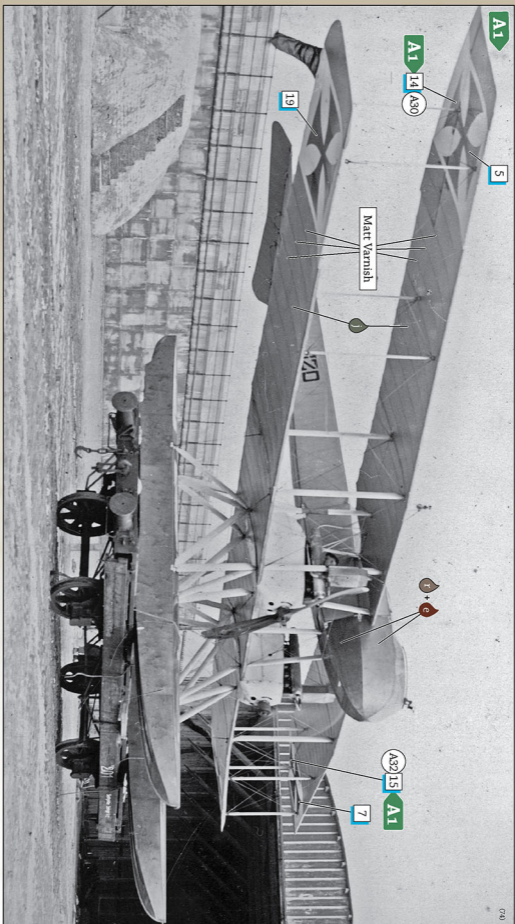


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Gotha WVD 120 undergoing testing at Warnemünde in January or February 1916. The normal complement of crew was intended to be 3, although at least 4 can be seen in this photo. In one instance WVD 120 carried 6 people as ballast. Note the dark varnished plywood nose section and rear of the fuselage.





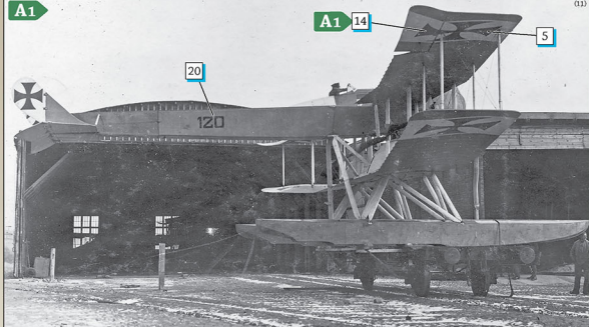
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Gotha UWD 120 undergoing testing at Warnemünde in January or February 1916. Note the wing tip streamers and how the matt finish of the rib tapes stand out against the gloss finish of the wings. To build **A1** as shown here, omit bomb dropping tube proboscis **(27)** & **(28)**, use unbalanced ailerons **(30)** & **(32)** and fill nose windows **(14)** & **(15)**.

A1

A1 14

(11)



Gotha UWD 120 undergoing testing at Warnemünde in January or February 1916. Note the opaque nature of the linen covering.



32053 Product Design by Nick Moore

Nick is an Industrial Design graduate and an experienced scale modeller with a longstanding interest in most periods of history. Before working at Wingnut Wings he knew less about WW1 aviation than later periods and was surprised by the innovations achieved during this time. His investigation of WW1 aircraft has encouraged further his interest in aircraft of the "Golden Age" of the 20's and 30's which have particularly beautiful forms.

The 3D design challenge he found while working at Wingnut Wings from 2008 until 2015 was adapting the real aircraft to scaled down replicas with the necessary adjustments for injection moulding, when of course, as a modeller – he would like 100% reality.

Nick was at one time a private pilot but never took the controls of a bi-plane – the oldest plane he was rated in was the classic old tail dragger, the Piper Cub. These days most of Nick's spare time is spent with his young family.



32053 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. 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 richardwingnutwings.com



Profile Art by Ronny Bar

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

building models: Spitfires and Messerschmitt first... Camels and Fokkers later.

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

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

Visit Ronny's Facebook page - www.facebook.com/RONNY-BAR-Aircraft-Profiles-166538664131/



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.



32053	1/32 Gotha UWD	Qty
0132045A	A parts	1
0132045B	B parts	1
0132053C	C parts	1
0132053D	D parts	2
132E0005	E parts Merc D.III engine	2
0132053G	G parts	1
0132053P	Photo-etched metal parts	1
7132053	Instructions	1
9132053	Decals	1

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



32066 - Felixstowe E.2a (Late)



32036 - Hansa-Brandenburg W.12 Early



32801 - Felixstowe E.2a & Hansa-Brandenburg W.29

Also available from
www.wingnutwings.com

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