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NEXT MEETING

Tuesday 19th June 2018

Leys Institute (upstairs)

20 Saint Marys Road

Ponsonby

COMMITTEE

Chairman - John Swarbrick	Dave Stewart
Secretary - Brett Peacock	Lance Whitford
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From the Editor

We are almost half way through 2018 already. Winter is upon us and what better way to while away all the cold wet weather than to build the odd kit or two. For those who want to enter our Pacific themed contest, there are still a few months of building time. No better time to start than now.

Speaking of no time better, for all those who have yet to pay there subs for 2018 please do so ASAP. See the next page for what to pay and how to make your payment. Online bank deposit is our preferred payment method. Don't forget to provide your name in the reference section or your payment will be just another anonymous donation!

New IPMS Chapter!

With the thawing of tensions on the Korean peninsular. Kim Jong Un has turned his attention toward more peaceable pursuits. This picture comes from the inaugural meeting of the IPMS DPRK chapter held in Pyongyang recently. Always nice to see a good turnout of military models.



Kim Jong is very disappointed when General Wong Col Urh points out his OD Green paint on his truck is correct and Kim's Olive Drab is way off. General Wong failed to appear at the ribbon awards ceremony later that afternoon.....

BULLETIN BOARD

NEW MEMBERS AND SUBS *** 2018/19 NOW DUE *******

Subs for 2018/19 now DUE - see below for club account details or see the club secretary
at the next club meeting.

Membership Type	Description	Cost
Full	Living in the Auckland Metropolitan Area	NZ\$45
Out Of Town	Living 75km or more from central Auckland	NZ\$30
Junior	Same rights as full membership for those under 16	NZ\$25

IPMS BANK ACCOUNT NUMBER

03 0162 0012960 00

*Please add your name and details
so we know who has paid!*

EVENTS

CLUB NIGHT EVENTS

IPMS Auckland Meet on the 3rd Tuesday of every Month at the Leys Institute (upstairs), 20 Saint Marys Road, Ponsonby

- **19 June** Bring, buy and swap
- **17 July** We will be looking to begin a new round of workshops and demonstrations . Watch this space!
-

MODELLING EVENTS

Nothing new to report the month!

CLUB SUPPORT

The following retailers have kindly agreed to offer IPMS Auckland club members a discount on their purchases upon presentation of their current IPMS Auckland Membership card.

The discount only applies on selected product lines and remains at the discretion of the retailer.



ModelAir

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(Note: not in conjunction with any other promotion)



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10% off most items on presentation of IPMS Auckland Membership Card.

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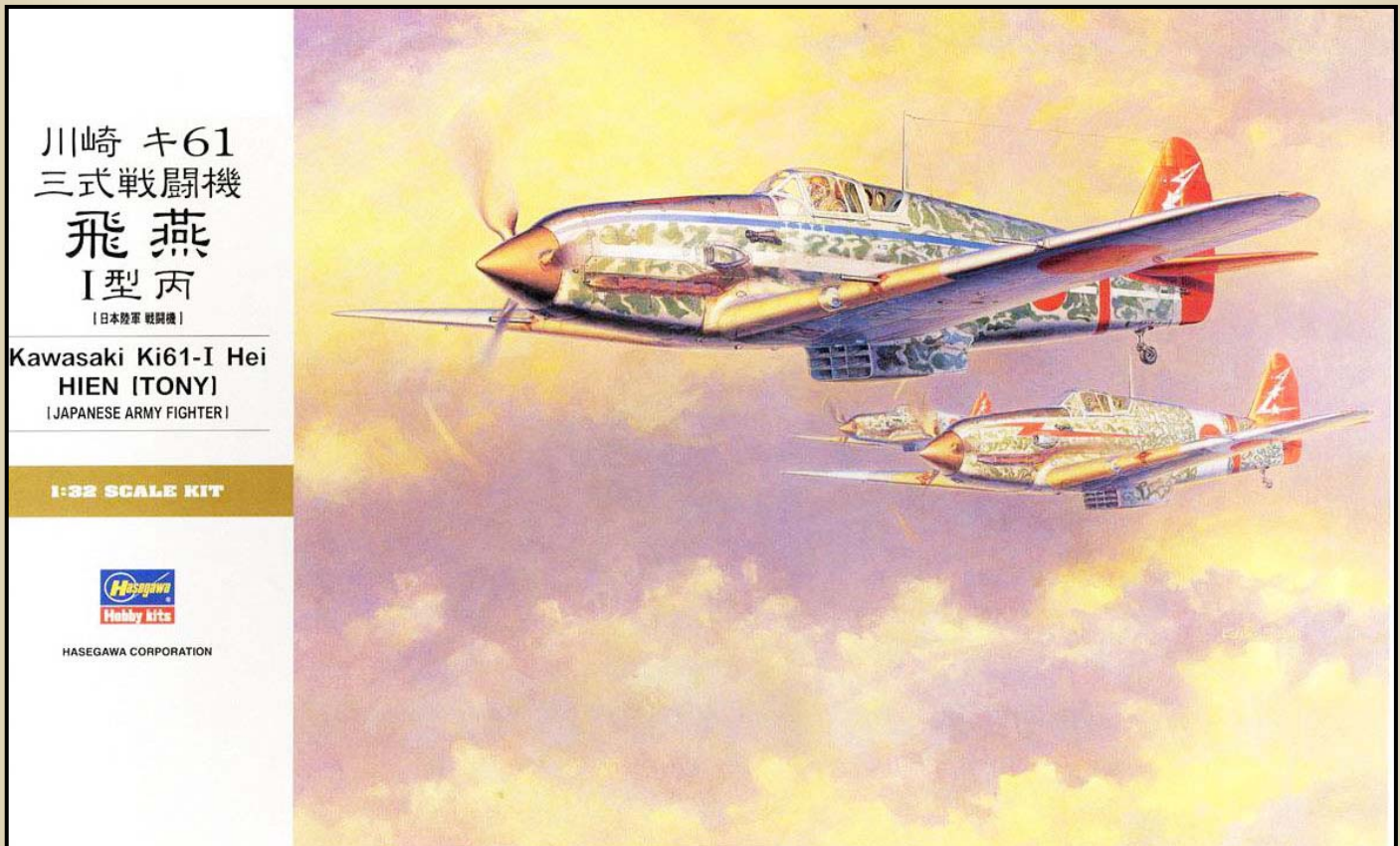
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Hasegawa Ki-61 Hien (Tony) 1/32 Kit 8078

By Bruce Salmon



My model represents Ki-61-1 Otsu, 68th Sentai (Manufacture number 640) operating from Boram airfield near Wewak, Papua New Guinea. The Otsu armament was 2 Ho-103 12.7mm MG in the nose and the same in wings.

The pilot force landed his aircraft on an open area of Kunai grass near Yilipe to the south of Aitape around late Dec 1943. The aircraft was recovered to Port Moresby in the 1970's and the empennage was later acquired by Kermit Weeks (Fantasy of Flight, Florida). At a much later date the remainder of the aircraft was shipped to Australia for restoration expecting an eventual return to the PNG Museum.

Ref. Pacific Aircraft Wrecks and Where to Find Them by Charles Darby. Kookaburra Technical Publications Pty Ltd 1979. Pg 3, 68 middle and bottom.

Construction

Originally I wanted to get the 68th Flight Regiment Ki-61 (Kit 8190) as it sports a retractable tail wheel and correct wing gun blisters. Unfortunately it seems to have been a limited run edition so I had to make these parts from scratch.

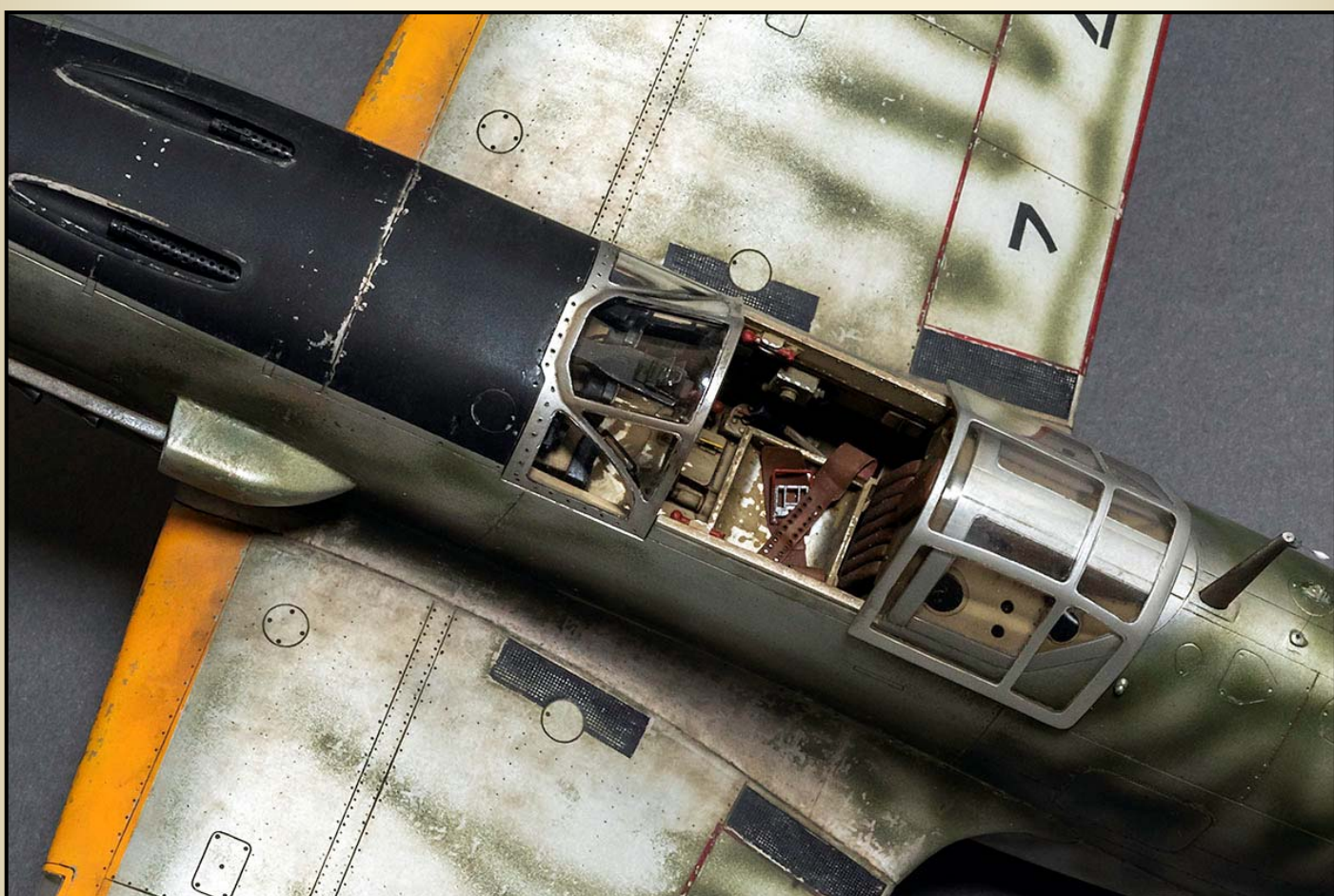
Aftermarket Products Used:

- Aires (2107) Kawasaki Ki-61-1 Cockpit Set 1/32
- Quickboost (QB 32 075) Kawasaki Ki-61 Hien Undercarriage Covers 1/32
- Quickboost (QB 32 037) Kawasaki Ki-61 Exhaust 1/32
- Master (AM-32-022) Ho-103 12.7mm Japanese Aircraft Machine Gun Barrels
- Montex Maxi Mask (MM 32071) Ki-61-1 Hien Hasegawa

Cockpit

Construction began with the Aires resin cockpit. This is one of their newer designs so it's basically a drop-fit replacement of the kit parts meaning you won't have to spend ages thinning down the fuselage side walls. The set is only let down by their instructions which are vague in places. The upper kit sidewalls will need to be ground down where PE parts (PP21-PP22) are supposed to be affixed otherwise the top edge would be far too thick. I should also bring to your attention that some of the kit parts are needed in the construction and that the instructions don't mention this. The emergency canopy jettison handles are oversized and should have been cast in resin not PE. You will also have to grind down much of the MG breeches to be able to fit the upper cowl over them. I made sure to offset the rudder pedals so that they would match the position of the rudder that I would later cut off and repose. In the rear decking behind the headrest, I scratchbuilt the fuel pressure regulator and its relevant pipework.

The cockpit was painted with 1 – Tamiya XF-49 Khaki / 1 – XF-59 Desert Sand followed by a wash with AK (066) Enamel wash for DAK vehicles. A drybrushing and chipping procedure helped to pop out the details.



Fuselage

Next the cockpit was glued into the fuselage with epoxy and the two halves cemented together; it was a tight fit. I forgot to glue in part A13 (the support for the tail planes) so instead I glued it into both planes and later cut it in half so that each plane would have a tab to ensure a strong connection when glued into the fuselage.

Also at this time I cut out the new tailwheel well and added some internal fittings to accept the tailwheel leg which I remade from brass tube for extra strength. I then scratch built some hinged doors to fit. The radiator assembly went together easily and was inserted without too much fuss. I thinned the rear end of the shutter flap to a more reasonable scale thickness.

Some attention was also needed in the nose area. The exhaust gas deflection fairings G5 were far too thick and had to be thinned. I also glued some plastic card ribs to the underside of the upper cowl and drilled them out to accept the exquisite Master MG barrels which would be added later in the build process.

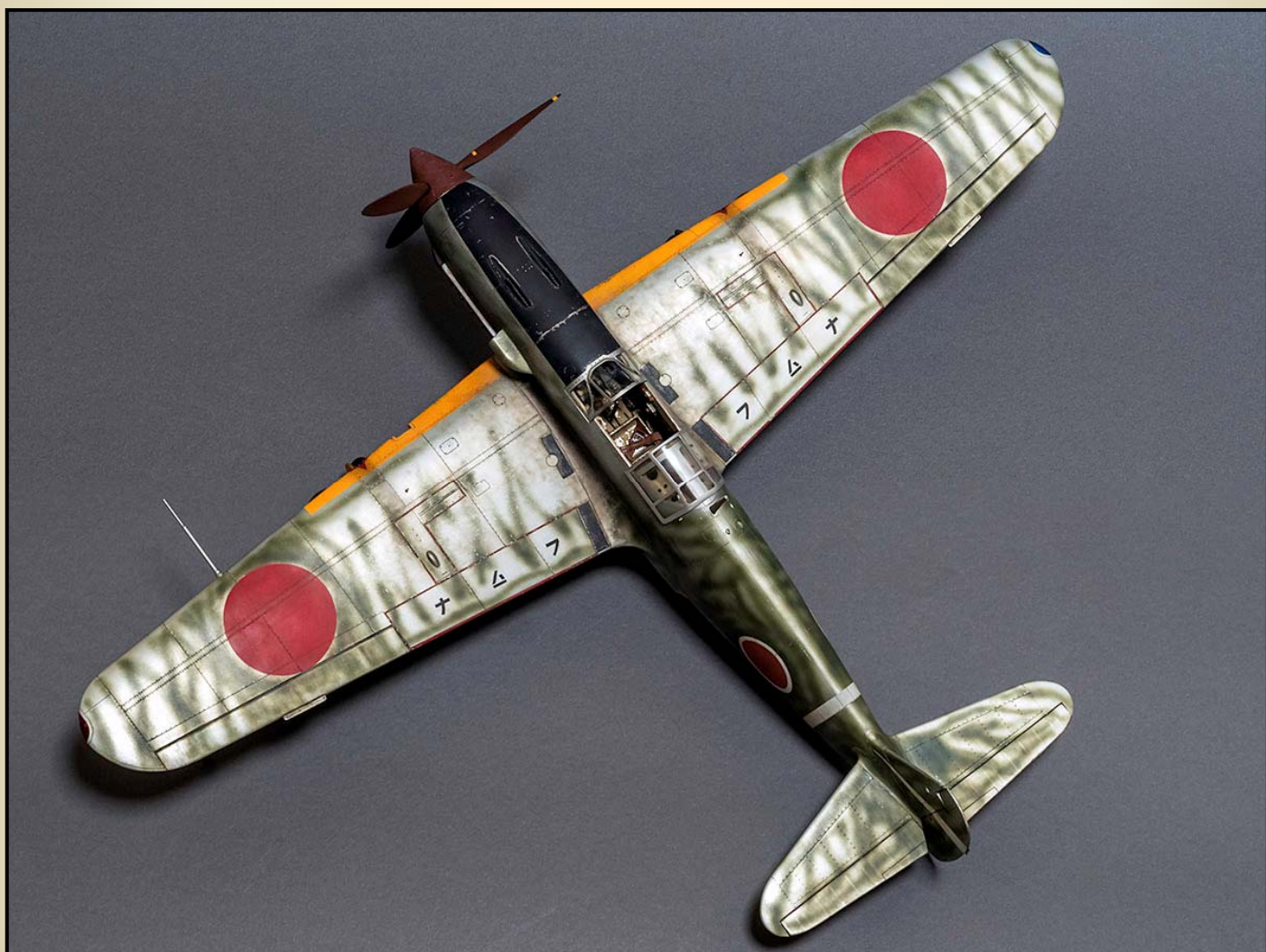
Quickboost's exhaust pipes were then dry fitted and I found some sanding, shimming and packing was necessary; consult your references here. I painted them first with Alclad ALC 123 Exhaust Manifold then weathered with AK 013 Rust Streaks and AK 046 Light Rust.

The kit aerial mast is poorly fitting as the hole for it is far too large. I shimmed the hole and also made a brass rod insert for the mast to ensure a more secure attachment. The rudder and elevators were then cut out and repositioned for a more dynamic pose which I think adds a bit more life to the finished model.

Wings

Next the two wing halves were joined. The trim tabs were ridiculously thick so I cut off the ones on the top wing surfaces and thinned those on the bottom. I then dealt to the gun tube openings as they are far too wide and had to be remade. I cut the holes even larger and inserted plastic tube of the appropriate internal diameter. Once the glue had dried I sanded them to match the leading edge profile. I also made some machine gun barrels from plastic rods which were painted black and glued at a suitable depth inside the tube openings.

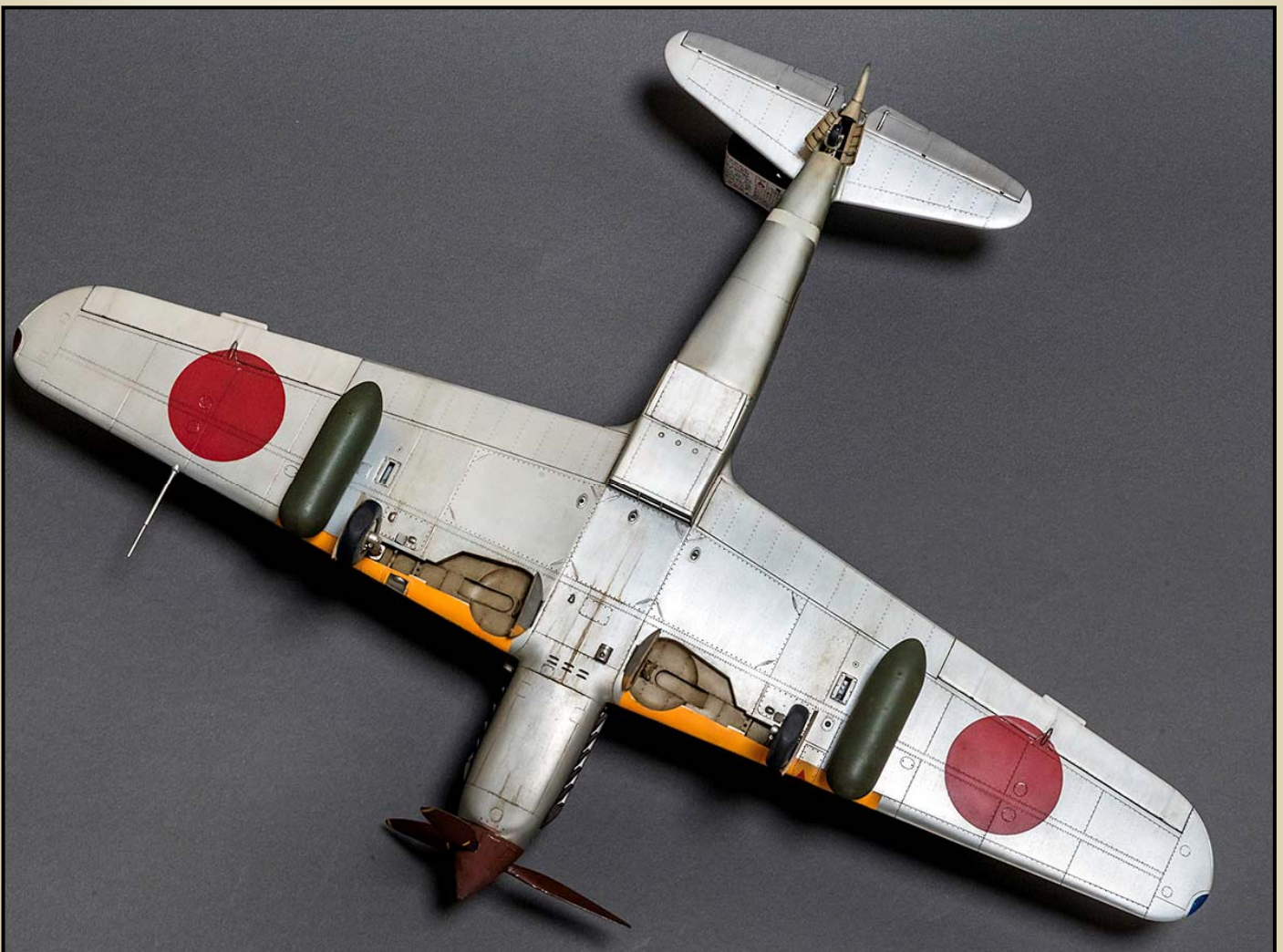
The same method was used for the pitot tube opening but using brass tube instead. Whilst the glue was drying I aligned it precisely so that when I inserted my newly scratch built brass pitot tube it would fit easily and at the correct angle. New gun blisters had to be fashioned by first sanding off the moulded ones and gluing on replacements using 40 thou plastic card pre-sanded to shape.



Construction Continues

The wings and tail planes were then dry fitted before being permanently attached. There is a sizeable gap in the top of the port wing root which was partially alleviated by sanding the bottom joint. The remaining gap was then shimmed with 10 thou plastic card. A possible cause may have been the tightly fitting resin cockpit as I have seen the same problem in another online build using this cockpit; I have not heard of any problems arising from using only the kit parts. Next the model was primed with Alclad ALC 302 Gray Primer and Microfiller and then sanded with wet 4000 grit sandpaper.

The whole airframe was then riveted using the RB Productions (RB-T010) Rivet-R Mini riveting tool. This an excellent tool although the size of the holes it produces are better suited to 1/72 and 1/48 scale. For 1/32 scale you need to widen and deepen the holes with a pointy scriber; I didn't bother and consequently the holes are quite hard to see especially once you have painted over them. If you want to save time I would suggest only enlarging the rivet holes where they are most noticeable such as the around the nose, cockpit sides and inner half of the upper wings. After riv-



Undercarriage

eting, the The main landing gear legs need some attention as they are rather basic.

My method was to first glue the hubs (C19,C20) to the appropriate legs. I then added brake lines using fine brass wire. They were painted Alclad ALC 106 White Aluminum and weathered with Tamiya Panel Line Accent Colour Dark Brown.

Next the wheels were painted dark grey and mud colours were applied to the sidewalls using Tamiya Weathering Master A set (Item 87079). I then painted the Quickboost undercarriage gear doors. The only difference between these doors and the kit parts are that the inner surface ejection pin marks have been removed and the outer surfaces are riveted so it's up to you if you think

Propellor

The base of the prop blades needed some sanding and the spinner required dry fitting as the fit around the blade holes is a bit tight. I first sprayed a coat of grey primer then painted the yellow tips of the blades. Then a mix of Tamiya XF-9 Hull Red and Mr Hobby H-47 Red Brown was applied using a slightly darker mix for the propeller blades. Next I masked off the blades and used the salt weathering technique on the spinner. I painted two colour layers both highly thinned (15/1). Firstly salt was applied then I sprayed with light red brown. The initial salt was washed off and another lot applied before spraying with black. Lastly the whole unit was washed and then further weathered with an oil wash and some chipping and drybrushing.

Canopy

To be honest the open canopy is probably the worst part of the kit. It is extremely thick for this scale and the sliding section sits far too high at the rear when fully open. I plunge-moulded a new sliding section using the closed canopy part Q4 as a mould. It turns out a little wide at the lower front edges and a little narrow at the back. As I didn't have the right thickness of plastic to mould with I gave up and resorted to using the kit part instead. The edges of this were bevelled and the inside was sanded out and then polished for a better fit. I really wish there was an aftermarket replacement part for this.

I then masked the outside of the canopy parts only using the Montex masks. These were a pain as they are ill-fitting and had to be cut up for a better result. The interior colour was painted first; black for the windscreen and the cockpit colour for the sliding and rear sections. Once dry this was followed by a top coat of enamel X-11 Silver then a satin varnish to finish.

Drop Tank

The drop tanks needed some filling and sanding to achieve the correct profile. I decided to paint them XF-13 J.A. Green lightened with some XF-4 yellow green. I then used the salt method of weathering beginning with some highly thinned yellow green. The initial salt was then washed off and a second application applied and painted this time using thinned black. The pylon was painted ALC 103 Dark Aluminum and once dry the tank was attached.

Painting and Markings

This began with masking and then painting the wheel wells, the leading edge stripes, anti-glare panel, Hinomarus and other theatre and unit stripes. The Hinomarus were painted 5 parts Mr Color lacquer 327 FS1136 Red / 1 part 29 Hull Red / 1 part White and the leading edge stripes 4 parts XF-3 Flat Yellow / 1 part Mr Hobby H24 Orange Yellow. Once dry these were masked over and the airframe sprayed with Alclad Aluminum ALC 101 with a few panels in ALC 103 Dark Aluminum. The salt weathering technique was used again to age the aluminium finish. First I used heavily thinned white and secondly black. Interestingly the white made the most visible effect. The model was then washed several times as the salt tends to get into everything. Next I masked and painted other smaller details and applied a few decals. Another thing that's sorely lacking in this kit are stencil decals for things such as the under wing pylons, landing gear leg placards and various other hatches. Following this a coat of acrylic satin clear was applied using a mix of Tamiya Acrylic X-22 Clear and XF-86 Flat Clear. The wavy pattern was then sprayed freehand using XF-13 J.A. Green and finally the masking was removed.

Now I went to work wet sanding the paintwork with 8000 grit sandpaper to give it that worn-off look. The satin clear forms a slight barrier so that you can sand off the green without sanding through to the Alclad or the underlying plastic. Unfortunately the satin finish traps the green paint unevenly so that I ended up with a spotty effect.

Further sanding eliminated most of this problem. You also need to be careful sanding near decals as it will show up their edges easily. Lastly I painted the exhaust stains and gun smoke residue. Once the painting was complete I gave the model a protective satin clear coat.

It was at this time that I discovered the landing light cover had cracked. This was replaced with one that I plunge-moulded from a mould that I made from plastic card and Milliput. I had to half guess at its shape as I couldn't touch the wing due to it already being painted. Next the main landing gear legs were attached to the wings with epoxy glue to give a drying time long enough to be able to move them into their correct positions while aligning the wheels as well. Lastly the gear doors were attached.

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Weathering

The model was given an overall filter wash by painting along every panel and rivet line with Tamiya Panel Line Accent Colour Dark Brown. The excess was then half wiped off but also blended in using a wide flat brush slightly dampened with white spirits.

Some panel lines were darkened with further darker washes. Oil streaks on the belly were made with AK Interactive AK 025 Fuel Stains and some restrained chipping was applied with a fine brush and X-11 Silver enamel paint. Another light satin clear coat was then applied.

Next the exhaust pipes were attached and further weathered using the rust and soot colours from the Tamiya Weathering Master B set (Item 87080). Lastly another filter wash was applied to the upper surfaces using AK 022 Africa Dust Effects / AK 080 Summer Kursk Earth 50/50 thinned 50% with turps.

Final Assembly

The drop tanks on their pylons were attached without any fuss followed by the other breakables: Master MG barrels, sliding canopy, radio mast, pitot tube and main landing gear retract indicators on top of the wings. Finally some dust pigment was lightly brushed onto the wings and drop tanks and also some general grime around where the pilot and ground crew would walk. I noticed that the canopy silver didn't quite match the Alclad on the airframe so I painted it with some highly thinned raw umber oil paint which helped to a lesser degree.

Overall it's a reasonably good kit, however for a modern piece Hasegawa could have made a better effort especially concerning the scale thickness of some parts. The decals are in need of further embellishment and it would be nice to have a decent canopy for this bird because it sorely deserves one.







AZ Models 1/48 Kayaba Ka-1 "KaGo" Model 1 O-Go

By Brett Peacock



In Box Review: AZ Models 1/48 Kayaba Ka-1 "KaGo" Model 1 O-Go. (Auto Gyro.)

Kit: AZ4809

1 Sprue of medium grey plastic (41 parts), 1 sheet of acetate, 1 Etched metal fret (15 parts) and 15 Resin parts. 1 small sheet of decals for 1 Navy and 1 Army example. Thanks to The Model Room, Papakura for my example which retailed at \$40.00

Historical Note: In 1939 the Japanese Government acquired 1 Kellett KS-1A Autogyro (Itself a close copy of the Cierva design) to use as a pattern for producing the type in Japan, for use by both the Imperial Japanese navy and Army.



Production was handed to the Kayaba Industrial Company which soon decided to re-engine the Radial powered Autogyro with a 210Hp Kobe engine, a License built Argus As 10C. (the same engine as the Fieseler Storch) Entering service in 1941 the O-Go, as it was dubbed, proved to be effective with both the Navy (As an Anti-submarine and Coastal Patrol)) and with the Army as a Scout and Artillery Spotter, which made it one of the VERY few Equipment items that were used by both Imperial services, which were notoriously leery of using gear favoured by the other. Over the course of the war some 240 examples of the type were manufactured for the Military, supplementing a number of other types used in those roles.

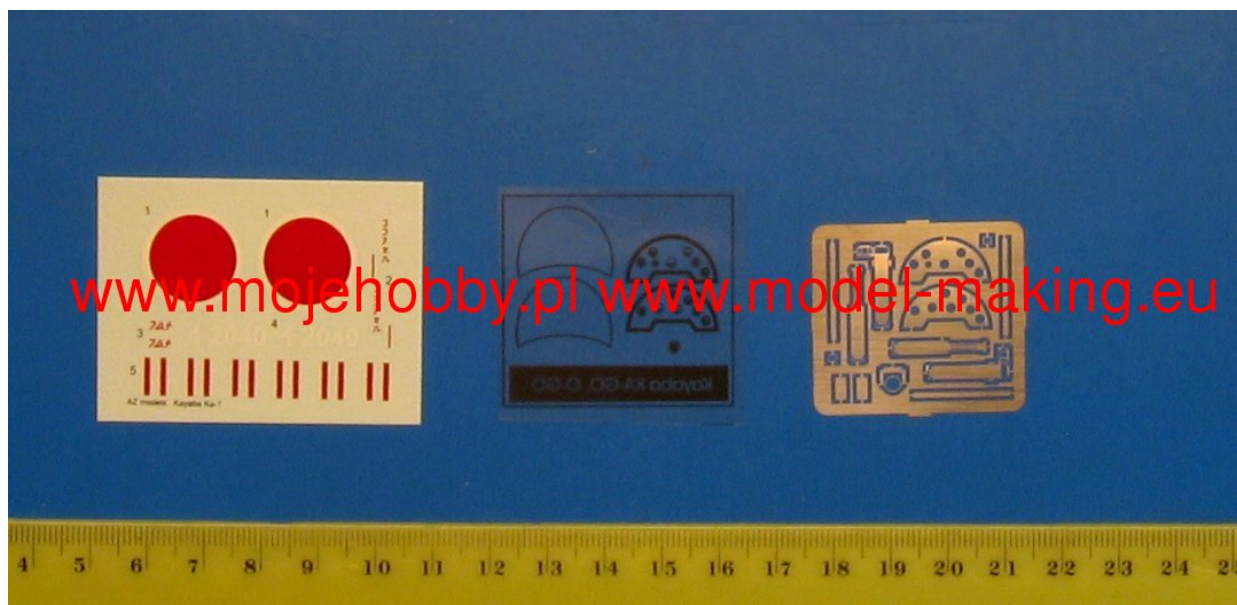


(Note, an Autogyro is NOT a Helicopter, it uses forward speed generated by the engine, and propeller - like an aeroplane - to spin the rotors, not an engine geared for that job – like a Helicopter. The result is that the Autogyro requires a runway (of some kind) to build up speed until the rotors can lift it, but can be landed like a helicopter while the rotors are spinning, or it can also land like an aeroplane.) While they have been largely supplanted by helicopters now, the consensus among pilots is that Autogyros are much more fun! (Q's "Little Nellie" featured in the James Bond Movie "You Only Live Twice" was an Autogyro!)

AZ Models, part of the MPM group have been busy away in the Czech Republic of late and they have (as shown last time with their Ki48 Lily kit) been improving things for modellers of all things Imperial Japanese by leaps and bounds. (The I-Go glider bomb included in the Lily kit is also available separately as a kit, including the trolley!)



The kit comes in a surprisingly roomy, mid-sized box with the single sprue packed into a re-sealable bag, ala Eduard. Also in the bag is a small etched fret & printed Acetate sheet, bagged also, another smallish bag with some resin parts (Engine front for the cowling, wheels and some fine details) and a single small decal sheet.



AZmodel
Plastic kits

Kayaba "KA-GO" model 1
Kayaba auto-gyro "O-GO"

Plastic Kits

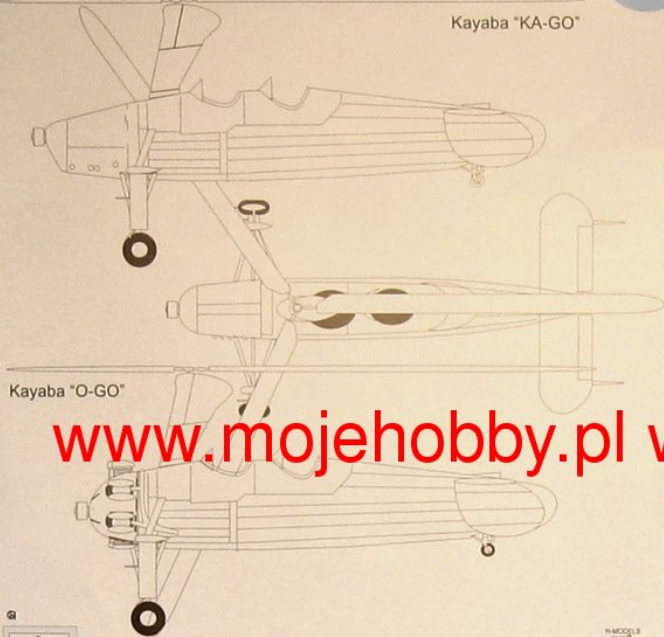
AZ 4808 , AZ 4809

Scale 1/48

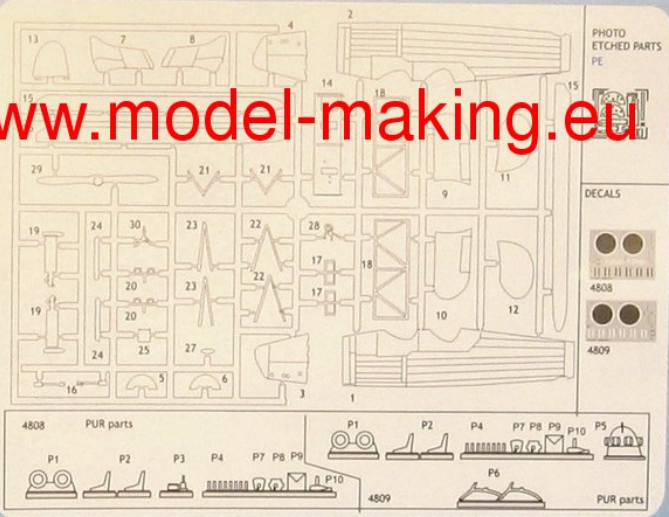
The Japanese government, after acquiring and testing a Kieffer KD-1A autogyro in 1939, turned the aircraft over to the Kayaba Industrial Co., which subsequently built an inline-engine version of the aircraft as the Ka-1. This was powered by a 240 hp Kobe engine / license version of the German Argus As. 10C /, the first Ka-1 was flown on 28 May 1941 and eventually, some two hundred, and forty aircraft of this type were built. They were employed during World War 2 by the Imperial Japanese Army for artillery observation and cooperation duties, and by the Navy for coastal or carrier-base anti-submarine patrol carrying two 60kg bombs or depth charges. One Ka-1 was modified for trials with small auxiliary rocket at the tips of the rotor blades.

Technical data:

Engine: 1x "Argus" As 10c piston engine, rated at 180 kW, main rotor diameter: 12,2m, length: 7,66m, take-off weight: 1170kg, empty weight: 755 kg, max speed: 165 km/h, cruising speed: 115km/h, ceiling: 3500 m, range: 280km, armament: 2x60kg depth charges.



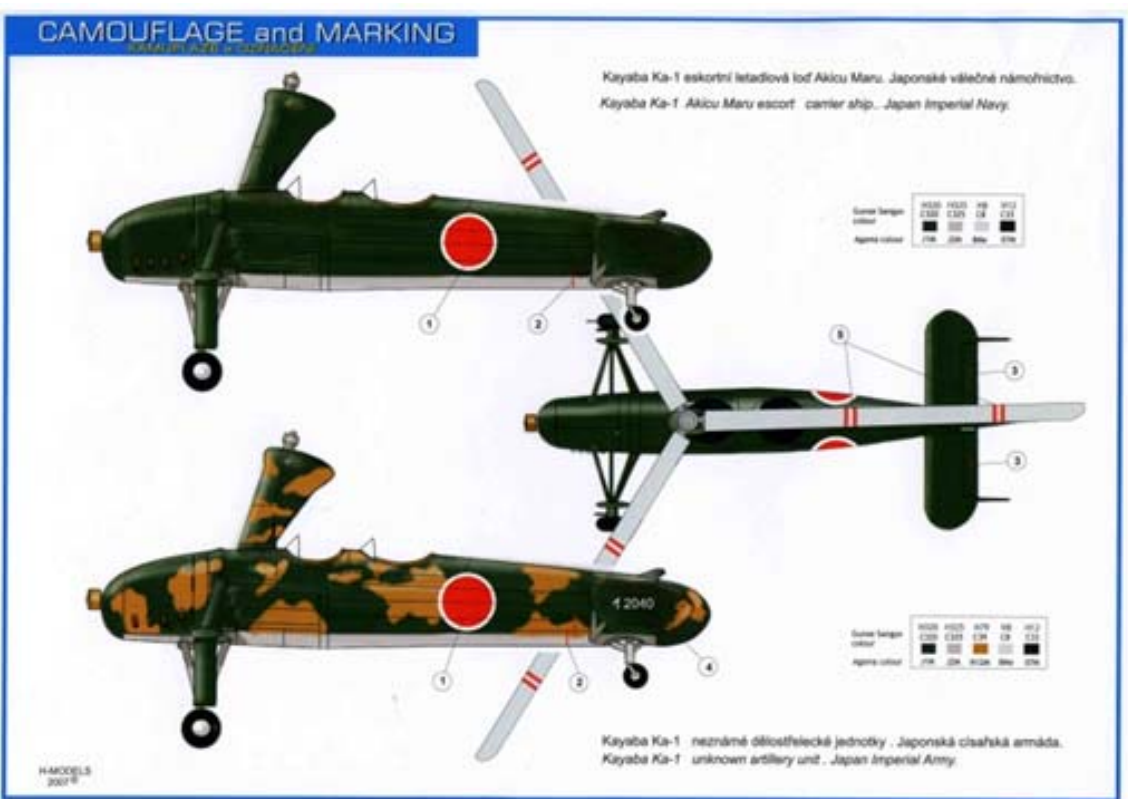
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Number			Number		
A	07M	Black	H2	C33	Black
B	01M	White	H1	C62	White
C	J8M	Dark Grey	H83		Dark Grey
D	04M	Rod	H3	C3	Rod
E	09M	Blue	H5	C5	Blue
F	08Me	Silver	H8	C8	Silver
G	I9M	Brown	H310	C310	Brown
H	Iz2M	Green	H312	C312	Green



The instruction sheet is colour printed on glossy paper (2 Sheets) and includes a parts map as well as a paint reference. Like the "Lily" kit, the instruction sheet covers building the other model of KaG O Autogyro with the original Radial engine, but no parts for that are included as the engine for it appears to be a resin casting of some size.



The plastic parts, themselves are finely molded, even of a limited run kit like this, and will need careful, very careful treatment to avoid breakages during assembly. In fact I would recommend not glueing the rotors to the masthead at all, as the Linking centrepiece looks very fragile and may need separate storage from the rest to minimise any accidents. And the multi part undercarriage will be very tricky to assemble and even trickier to get it symmetrical! (6 struts and braces per side!!).

Like the Ki48 Lily this kit will repay the modeller who can put the care and time into assembling it and refining or redefining the parts where necessary. It's not a kit for the novice or impatient to try for their first limited run kit. But if you have a few behind the glass on your shelf, then I can recommend that you take a look at this military Autogyro kit.



British Tank Churchill Mk.VII - Crocodile

1/48 Scale By Andrew Birkbeck



Background

The British Churchill tank was one of the most important tank designs introduced by the British after the start of the Second World War. Following the collapse of the French armies at the hands of the invading Germans utilizing Blitzkrieg tactics, British forces lost most of their front line military equipment in France in May 1940. The British reevaluated their previous views on the purposes and uses of tanks following these losses, and came up with more modern designs, the Churchill tank being a prime example. It was heavily armored, and with the introduction in 1943 of the Mk.VII, better armed, sporting as it did a 75mm main gun capable of firing both high explosive and armor piercing rounds. In preparation for the D-Day Invasion in June 1944, various "specialized" tanks were dreamed up, including a flame throwing version of the Churchill, named the Crocodile. This new Tamiya kit provides parts for modeling either a standalone gun armed Mk Mk.VII tank, or the specialized flame throwing Crocodile with trailer.

What's in the Tamiya Box

- 5 sprues of injection molded green plastic parts
- 1 bag of black vinyl polly caps
- 1 metal ingot
- 1 small sheet of water slide decals with 2 marking options
- 1 booklet, with 8 pages of black and white assembly instructions covering 20 assembly steps plus a separate double-sided sheet incorporating a markings and paint-

Construction

Anyone who has built a Tamiya kit in the past two decades or more will be familiar with what comes in the box of this kit: beautifully molded flash free plastic parts, very well detailed, and with no sink marks to be seen. There are however occasional ejection pin marks, most of which are well hidden when construction is completed. There are no photo etched parts whatsoever, so construction of the model can be accomplished without the use of super glue. Tamiya provides the modeler with a near fool proof set of excellent instructions, and if they are followed to the letter, and studied carefully before beginning construction, a drama free modeling project should ensue



Step 1: Construction starts as most tank models do, with construction of the lower hull. This Churchill kit hull consists of a lower hull plate, and two side hull parts. The latter include all the suspension spring detail as well as the inside road wheels molded integrally. Tamiya continues to utilize a metal weight which the modeler glues into the interior of the hull, but this can be ignored if you wish. Step 2 involves the installation of the front hull glacis plate and the vertical front hull plate, which houses either a machinegun or the flame thrower unit for the Crocodile version. So, the modeler needs to decide which version of the Churchill tank they are building from this Step moving forward.

Step 3: completion of the lower hull, with the addition of the outside roadwheels, which are in two simple but well detailed parts, one per hull side. Another part for the Crocodile version is also installed on the underside of the hull. Step 4 sees the hull rear plate installed, which differs between the gun tank version and the flame thrower version, so make sure you get the correct part installed. Step 5 involves the assembly of the two-part idler wheels, and it is important to mount them the correct way around, so as to have the tracks line up correctly in the next section. Step 6: track installation. Tamiya provides individual links as well as longer lengths of track, and it is critical that one follow the suggested order of installation. Do so, and they should be a breeze to install. The tracks have injection pin marks, but these won't be visible on the completed model. Interestingly, Tamiya has chosen not to have a full set of tracks for this kit. There is basically no top run of tracks, because the kit fenders and side plates hide this area. Later Mark Churchills can be seen minus parts of the fenders, thus exposing the upper run of the tracks. So, any modeler wishing to pose their Churchill this way will need to figure out where to find additional track links. For most modelers, who will build the fenders as they come in this kit, there are no worries. (Steps 7 & 8)



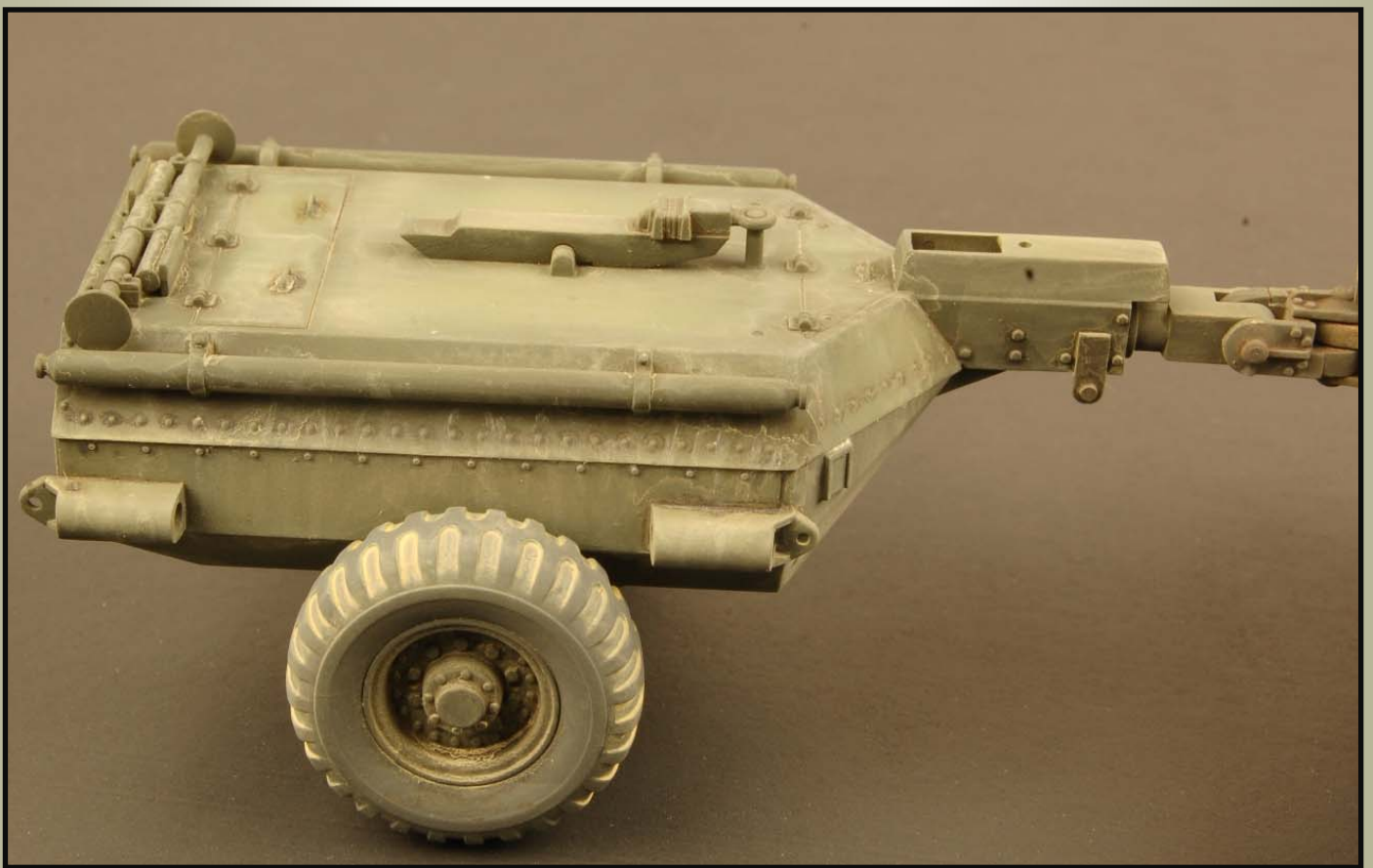
Tamiya provides separately molded shovels, mounted on the rear upper hull, together with separate cables for each side of the hull. The mounts for the shovels are a little chunky, and perhaps could usefully be carved off and replaced by a simple belt and buckle sourced from an appropriate PE set? The tow cables could also use some simple mounting brackets made out of scrap plastic sheet? Step 9 involves the mounting of the rear hull exhaust, and its protective shield. The exhaust of course gets super-hot, and blisters off the paint, and forms a pitted surface that easily rusts. The protective shield could also get very hot with prolonged use, so paint both appropriately.

Step 11: the addition of more parts for the Crocodile version, the articulated hitch on the rear of the hull for attaching the two wheeled trailer that contains the fuel for the flame thrower. Step 12: carefully assemble the front sections of the mudguards/fenders and note for the painting stage that they have rubber areas that need painting a dark grey color. On my kit these parts slipped onto the fenders easily and lined up without hassle.



Steps 13 through 15 involve the assembly of the turret. Detail is good, including the cast metal effect for the turret sides. There are four main parts to the turret, a bottom plate, the turret shell in two parts, and a roof part. There is a four-part turret bin that goes on the rear of the turret and hides the seam joint of the two turret shell parts. Only the commander's hatch is molded to open, and there is a nicely detailed four-part commander half figure for mounting in the turret. The co-axial machinegun needs its barrel opening carefully drilled out for a better look.

Steps 17 through 20 involve the assembly of the Crocodile fuel trailer (and is thus unnecessary if you are building the gun tank). The trailer is nicely detailed for the scale, and the fit of the parts is excellent. There was a sink mark (horrors!) on the upper neck of the tow hitch which needed dealing with, but the section affected was a flat area, devoid of raised detail, so posed no problem puttying and sanding smooth. The trailer wheels are two part and have nice tread and wheel nut detail. My one alteration to the kit detail was the removal of the rear trailer door handles which came as molded on blobs, and drilled some holes and fashioned simple handles from brass wire.



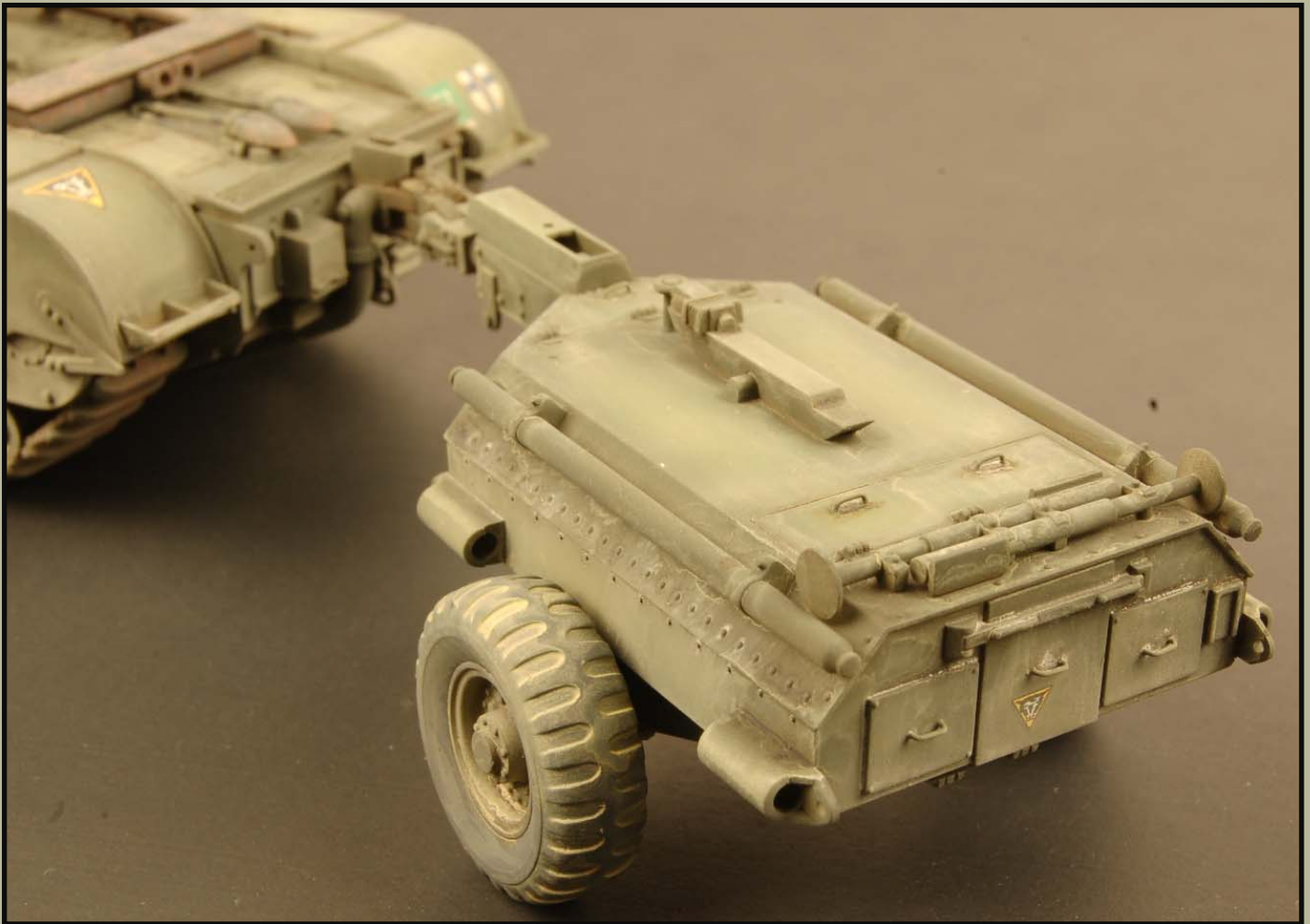
I assembled the kit in five sub-assemblies for ease of painting: hull, turret, trailer and the two trailer wheels. All the parts were primed with Tamiya's superb "Fine Surface Primer: Light Grey" item # 87064. When this stuff has cured for a few days, it leaves the parts with an even, super tough initial layer of paint over the plastic, providing all the future coats of paint with a great foundation. Churchills were painted in the British color SCC-15 Dark Green, and Tamiya recommends their color XF-61 Dark Green. I have also seen more complex mixes as follows: Tamiya XF-58 Olive Green:XF-62 Olive Drab, 4:3 Ratio. XF-52 Flat Earth, XF-26 Deep Green, XF-1 Black: 4:4:1 ratio or XF-5 Flat Green, XF-68 NATO Brown, XF-1 Black: 20:6:1 ratio. Whichever mix formula you use, all can be lightened for panel shading with Tamiya XF-60 Dark Yellow. I thin my Tamiya paint with their proprietary brand thinner for excellent results.

Once the main colors had been applied to the kit parts, I airbrushed a few light coats of Tamiya X-22 Gloss Clear in preparation for the decals. The kit supplies two marking schemes, one each for a Churchill Gun tank, the other for a Churchill Crocodile. The Crocodile version of the kit that I built comes with very few decals, which I thought rather boring. So, I simply swapped the decals around, putting the ones meant for the gun tank, on my Crocodile. Sue me. The decals were typical of what one has come to expect from Tamiya over the years: well printed, with everything in register, if a tad thick. But once they were on the kit, and under a few more light coats of X-22 gloss, they were just fine. I then mixed up a suitable "wash" utilizing dark brown oil paint and some odorless mineral spirits and applied this over the turret, tank hull and trailer to pick out the details. This was allowed to dry for three or four days and everything was then sealed with multiple light coats of my favorite "clear matt" acrylic: AK Interactive's Ultra Matte Varnish.

Following the initial matt varnish coat, I took little bits of packing foam that I have saved for such occasions, and holding them with tweezers, dipped a piece into some Vallejo "Dark Rubber" acrylic paint, wicking most of the paint off on a paper towel and went about "chipping" paint on various parts of the model that were painted green. I took another piece of the foam and dipped this into some Vallejo "Track Color" and added rust spots to the exhaust parts. I followed up with some Vallejo "Rust" on the exhaust parts. Finally, I utilized various rust shades from Life Color's acrylic set "Liquid Pigments" rust colored washes. Using the Life Color rust set, I also placed "rust" on the two cables and other parts of the Churchill hull just to add visual "interest". This included the tracks.

Finally, I decided to add lots of road dust to the vehicle, testing out a new set I picked up, Lifecolor's acrylic "Rain and Dust Makeup" set in their Liquid Pigments range. I utilized two colors, Road Dust and Light Earth. I applied these in streaks up and down the sides of the tank and trailer, as well as puddling it around detail on horizontal surfaces. I slowly built up the dust and dirt layers over the course of three sessions. Then to finish off the project I airbrushed a couple of light layers of AK Interactive's Matt Varnish to seal everything, topped off with a few light layers of Tamiya XF-57 Buff acrylic paint, highly thinned, and airbrushed over the entire model, and a little more heavily on the lower regions of the vehicle.





I would like to thank TamiyaUSA for providing IPMS USA with the opportunity to review this superb model. It is simplified in certain ways, but generally is a well detailed model, and is an extremely satisfying build. Absolutely zero problems were experienced in its assembly, and I had a ton of fun taking the raw canvas of the plastic parts and turning it into a lovely piece of armored art! I can highly recommend this kit to modelers of every skill level.

GALLERY

CLUB NIGHT MODELS

Check out our Website gallery for photos taken of models at our monthly meetings

<http://ipmsauckland.hobbyvista.com>



And as usual - check out the IPMS Auckland website as we're trying to keep the content a bit more dynamic. We won't be regurgitating content found on other websites but will provide links to sites we think are of interest to members.

