

THE MONTHLY NEWSLETTER OF IPMS, NEW ZEALAND. AUCKLAND BRANCH

#### **Contents**

**Bulletin Board** 

#### NEXT MEETING

Tuesday 16th January 2018

Leys Institute (upstairs)

20 Saint Marys Road

Ponsonby

#### COMMITTEE

Chairman - John Swarbrick	Craig Sarge
Secretary - Brett Peacock	Lance Whitf
Treasurer - Mark Robson	Keith Bunya

ord

Mike Maran

EDITOR: Lance Whitford

e: lancewhitford@hotmail.com

WEBMASTER: Robert Willis

e: jaxbw@orcon.net.nz

EMAIL: ipmsauckland@gmail.com

WEB: ipmsauckland.hobbyvista.com

YAHOO: groups.yahoo.com/group/ipmsauckland

**FACEBOOK** Link from the IPMS Auckland Website

## The Chairman's Bit

Hi folks,

I hope the Xmas and New year has been kind to you, and you may have gotten some time at the bench or finished a project.

I had fun building a Eduard 'Weekend' kit of an I-16 in a weekend (48 hrs). I haven't built something that guickly before and it was an interesting exercise.

2018 sees IPMS Auckland entering our 51st year. We have the MOTAT military theme day coming up in March so let us know if your interested in attending.

Hope to see you at one of our meetings this year.

Regards

John

## From the Editor

Greetings from the land of Oz. I had high hopes of having endless modelling time while away and brought a range of projects with me along with a small range of tools with me. I left glues and fillers of the flammable type behind and fortunately found a source for these close to my new digs. I'm nearly half way through this stint and found that while I'm doing more than normal I have not met my own lofty expectations in the modelling department.

One mistake I made was bringing a project that requires more than the basic tools to complete, namely the Takom M3 Grant. Dodgy engineering means I really need some clamps and things like turned gun barrels to finish the major parts of construction off. I have packed that away and started on Tamiya's Matilda Mk III/IV "Red Army". What a contrast, the kit does not quite fall together but the usual Big 'T' engineering means stress free assembly and a very good level of detail. It's a crime that most of the suspension will be invisible once completed. The moral of the story is to find subjects that don't come with known assembly issues when looking for projects to build on the road. I'm not going to do any painting while away but hope that the Matilda is pretty much ready for that before my return. Build speed so far says I'll be moving on to another project well before I leave.

# **BULLETIN BOARD**

#### NEW MEMBERS AND SUBS \*\*\*\*\*\* 2017/18 PAST DUE \*\*\*\*\*\*

#### Subs for 2017/18 now past 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	ľ
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

- January One Night Quick Build
- February Basic and advanced Masking tutorial. NOTE. DUE TO BOOKING DIFFICALTIES THE FEBRUARY MEETING WILL BE ON THE 4TH TUESDAY OF THE MONTH 27-Feb-2018

## **MODELLING EVENTS**

Nothing to report this month

# **BULLETIN BOARD**

## **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 349 Dominion Road Mount Eden

Auckland p: 09 520 1236



**Stoker Models** Cnr Market Rd & Gt South Rd Auckland p: 09 520 1737 10% on kits and modelling supplies



#### TOYWORLD

Toyworld Henderson 56 Railside Rd, Henderson Toyworld Westgate 1 Fernhill Dve, Westgate

15% Off the normal retail price on:

- All models and modeling accessories

- All Hornby
- All Siku

- All Schleich & Collecta figures and accessories

- All Meccano

- Lego (Excludes Lego Mindstorm's they will be 10% if available as most have already been preordered)

(Note: not in conjunction with any other promotion)



#### **Merv Smith Hobbies**

27 Davis Crescent Newmarket Auckland

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

#### **Avetek Limited**

Gwyn and Christina Avenell 28 Lauren Grove, RD 2, Papakura, Auckland 2582, New Zealand. p: +64 (09) 298 4819, m: +64 (0)27 343 2290 e: aveteknz@gmail.com www.avetek.co.nz New Zealand Master Agents for: Auszac ECO Balsa • Bob Smith Industries - Cy-

anoacrylates and Epoxies • Airsail International Kitsets

## Airfix, 1/72 Scale English Electric Lightning F.2A

By Mark J Davies



#### Introduction

I gave Airfix's new-tool Lightning a "First Look" <u>here</u> on HyperScale four years ago. At the time I concluded that:

Airfix's new-tool Lightning is accurate, has nice surface detail, simple engineering that should build well; it comes with excellent decals, uses clear instructions, and is well-priced. It is undoubtedly the best 1/72-csale EE Lightning kit to date. This is an excellent effort by Airfix, and I rate it as their equal-best so far 1/72 release, along with their new-tool Fairey Swordfish. I recommend it highly.

Brett Green finished his copy of the same kit a couple of weeks later and published images and brief comments <u>here</u> on HyperScale. He mentioned that "*This is a really nice kit with genuinely fine crisp surface detail, good fit, and a high level of accuracy.*"

Having now built the kit, I can say that I stand by my assessment; although I'll be a bit wiser when I get around to building the essentially similar F.6 boxing recently released by Airfix. One point to watch however is the quality of the kit canopy. My one had a really prominent flow-mark I previously missed seeing. I checked with two mates who also had the same kit and found that they had the same flaw in theirs, one even with windscreen issues too. I requested a replacement from Airfix on-line and made do with my mate's canopy as his was a little better than mine. I know Airfix has had similar issues with their 1/24 Typhoon, so if you own a new-tool Lightning it will pay to check yours.



#### F.2A Armament

The F.2A was capable of being armed with four 30-mm Aden cannons, although when the lower pair was installed it could not carry its pair of Firestreak missiles, as the missile pack and cannon breeches occupied the same space (another alternative was a pack of free-flight rockets mounted in the same space, but rarely used by the RAF). I wanted my F.2A to show that four cannons could be carried by fitting all four cannon troughs rather than blanking the lower ones off (options the kit provides for). I thought at first that I would have to forgo fitting Firestreaks as a result. However, numerous photos of F.2A's show aircraft carrying Firestreaks and

all four cannon troughs in place; despite the fact only the upper pair of cannon could have been installed. I even found a photo of the aircraft the kit markings represent in this configuration (regrettably, I am unable to attribute the image below).



#### The Build

My plan was to build this kit as a relaxing OOB exercise, after having just completed Airfix's newtool Tiger Moth; a build that proved more demanding than expected. I used only one after-market item in the build, this being a tiny clear resin position light mounted on the spine; everything else was from Airfix, including the markings.

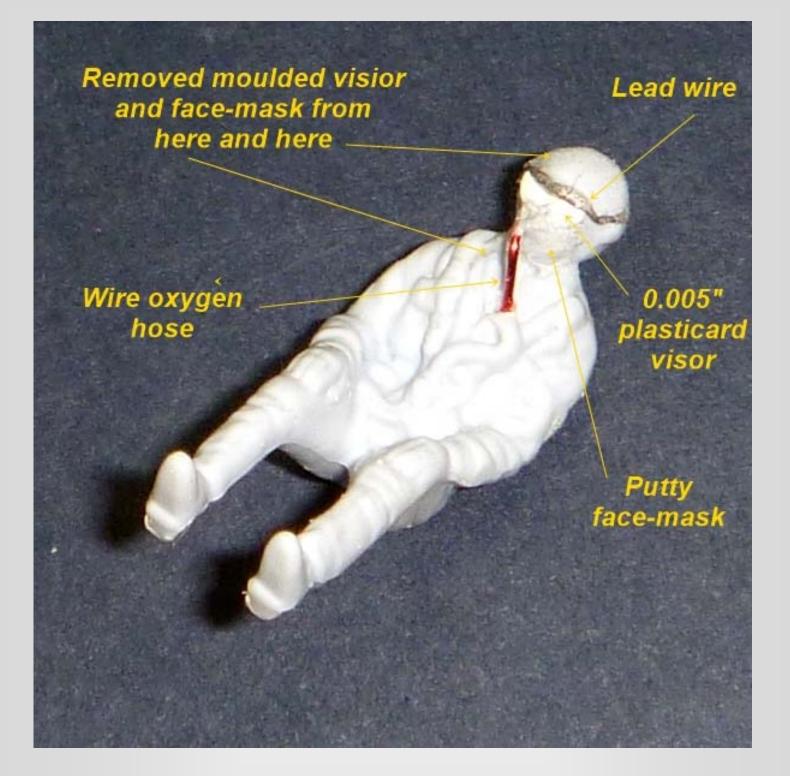
This was my third Airfix build under Hornby's ownership (the others being their Hurricane Mk.I & DH.82A). I have noticed from these builds that Airfix's styrene is rather soft and vulnerable to accidental scratches and cement damage, and is easily over-sanded or over-filed. This vulnerability was an important consideration for a bare metal finish, yet it still caught me out through my own ineptitude.

Airfix engineer the engine air intake lip as part of the two-piece intake ducting. Before the ducting can be joined you must insert the fairing for the nose-wheel well that also supports the radar/shock-cone. I was concerned that very little room would be left to fix any seams in the intake lip and for-ward ducting once this fairing was in place; so I tried a way to join the duct halves without the fairing inserted, in order to address the seams. And so I sawed a slot extending backwards from the hole in the ducting for the nose-wheel well, which also cut through the area where the ducting becomes paired vertically.



I joined the wheel well fairing halves and radar/shock-cone, and painted these. I sanded and blended the join seams in the lip and ducting and painted this too. I then wrapped tape around the ducting behind the intake ring to temporarily strengthen the join whilst I pried the slot open to slide the fairing into place. I figured that it would not be possible to see the slot I had cut as it was obscured by the fairing. (I did consider re-skinning the ducting where I had cut it away, but it wasn't necessary). Despite my cunning, I was caught out by the soft plastic and found I had over-sanded the intake lip. Consequently, I had to rebuild some of the lip using 0.010"plasticard.

I decided to run with the kit cockpit as very little would be seen, and chose to use the pilot figure as this was to be an in-flight model. However, the pilot as supplied has his face-mask dangling on his chest and helmet visor raised. I felt the pilot would look better wearing his mask and having his visor down. This meant I had to file these items off the figure and scratch-build them on his face using 0.005" plasticard, wire, and plastic putty. The added benefit of doing so was that had no pilot's face to paint. Once seated, I added to strips of lead foil to simulate the harness running from the seat to the pilot's shoulders.



My only other change to the kit cockpit was to remove the moulded seat firing handles and replace these with lead wire. I like to paint two-strands of lead wire, one yellow and the other black, twist these together to form a platted strand of alternating black & yellow, then curve two lengths into loops and attach to the ejection seat. This is easier than trying to paint the kit parts and has a finer scale appearance.

I use a standard style of stand for flying models in my display cabinet consisting of a turned wooden base and curved steel wire support. So no Perspex up the jacksy for my Lightning! Besides which, I wanted to be able to see the exhaust nozzles. This meant I needed to add a brass tube receptacle for the wire mount, and the best place seemed to be between the ventral fins. Accordingly, I drilled a hole and supported the brass tube with some .030"plasticard.

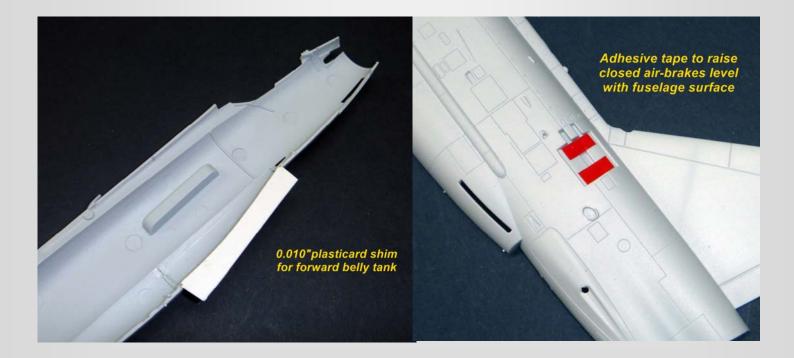


It is worth mentioning how much I appreciate the way Airfix caters for an in-flight option with most of its kits by supplying separate parts for closed undercarriage doors. In the case of this build the main doors just dropped into place, whilst the seating of the nose door required some trimming. But onepiece enclosures are certainly preferable to trying to "stitch" together several separate door parts intended for wheels down display.

Airframe assembly was generally very straight forward with good fit for most components. I did find that a few things needed adjustment for a good fit however:

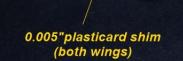
- The forward section of the belly tank consists of two separate parts that fit to the fuselage halves (enabling a F.6 to be offered from the same tooling). It may have been my construction at fault, but I was left with a slight gap to shim with 0.010" plasticard where the fuselage halves joined in this area
- The air-brakes sit too deep in their wells, so I placed some thin plastic tape inside these before cementing the brakes in place to raise them level with the fuselage surface.
- The cannon toughs and alternate blanking plates sit too proud of the fuselage surface. To remedy this I removed the recessed ledges they sit on completely from their openings. I had to do the same with the nose-wheel doors to make them sit flush too.
- I drilled out the cannon troughs through their rear on the inside of the plates they are set in. This ensured I did not damage the elliptical openings in the outside face of the troughs.

- There was a slight gap in between the wing and fuselage at the roots in the rear quarter-chord. This was most noticeable with the starboard wing. Rather than use filler I shimmed the wing-root in the affected area with 0.005" plasticard. I also fixed a slight gap between the port wing and the end of its flap using the same method.
- The missile pylons each have two very prominent ejector pin marks in their upper surfaces that need filling.
- I found that the clear seeker-heads of the Firestreak missiles to be larger in diameter than their missile fuselages. I don't think that this was due to over sanding of the join seams in the missiles, but I fixed the problem by gently sanding the seeker--heads down to size after fitting them to the missiles.
- The missile rail mounting holes need to be drilled a little deeper to fit the mounting lugs on the pylons, or you could shorten the lugs.
- Just a little filler was needed along almost the entire lower fuselage join, but this may be down to my sloppy construction.
- The canopy clamshell needed a kiss of sandpaper on its forward edge to drop into place between the fuselage spine and windscreen.
- If you plan to fit the refuelling probe you need to drill two holes in the lower port wing to accept it. Obviously, the drilled holes are round, but the lugs on the boom mounting points are moulded almost rectangular, and so need to be rounded for a good fit.



Recessed ledges removed to aid fitting of cannon trough plates level with fuselage surface

Recessed ledges for cannon trough plates in place on kit part



Ejector pin marks in missile pylons filled



Minor filling needed along underside fuselage seam

Brass mounting tube



#### **Painting & Markings**

I gave the entire model a polish with sanding cloths ranging from 2,400 to 12,000 grit. This was to remove the very slight pebbly texture of Airfix's plastic, and to match all surfaces with those previously sanded and polished as part of seam cleanup. I only did so as a bare metal finish was planned using the kit markings.

Quite a bit of masking was needed despite the apparently simple scheme. Paints and colours used were:

- Canopy, Anti-glare Shield & Refuelling Boom Tamiya Semi-Gloss Black (X-18 acrylic).
- Spine & Tailfin Gunze Blue FS15050 (H-328 acrylic).
- Radar/Shock-Cone Mr. Color IJN Gray Green (C-56 lacquer).
- Main Airframe Alclad II Aluminium (ALC-101 lacquer).
- Intake Ring, Fuselage Panels (below wing-roots) & Exhaust Surround Alclad II Polished Aluminium (ALC-105 lacquer).
- Cannon Troughs Mix of Alclad II Dark Aluminium & Gun Metal (ALC-103 & ALC-120 lacquer).
- Engine Nozzles Variations of Alclad II Jet Exhaust & Pale Burnt Metal (ALC-113 & ALC-114 lacquer).
- Lower Edges of Ventral Fin Alclad II Dark Aluminium (ALC-103 lacquer).
- Arrestor Hook Mix of Mr. Color Steel (C-28 lacquer) & Alclad II Dark Aluminium (ALC-103 lacquer).

- Firestreak Missiles Mr. Color Gloss White (C-1 lacquer).
- Clear-coat for Blue Areas Alclad II Klear Kote Light Sheen (ALC-311 lacquer).
- Clear-coat for Bare Metal Areas Modelmaster Sealer for Metalizer (lacquer).
- Wash Tamiya Black Panel Line Accent Color (Oil-based).

The kit decals were simply superb and performed flawlessly. Printed by Cartograf, these are the best decals, kit or after-market, that I can recall using. With all of the stencilling there were about 100 to apply over four decaling sessions. No doubt the Alclad II finish helped, but I found I had no noticeable silvering. The decals were thin but tough, and could be re-floated and moved, even after being tamped down. I only used Microsol on the little red patches that cover raised horseshoe-shaped lumps at the wing roots, where the decals had to settle around compound curves. I even found the decals to generally be located on the sheet in the sequence I used them.

#### Conclusion

This kit really captures the subtleties of The Lightning's outline, and is beats all of its predecessors in The One True Scale hands down. (Fortunately, it seems Airfix's long-run kit has probably strongly "influenced" the recently released Sword T.4 & T.5 kits, as will no doubt be the case with their forth-coming F.1 & F.3).

The kit is enjoyable to and very easy to build, although some minor trimming and shimming was required for my build at least. The soft plastic is vulnerable to surface damage by cement, oversanding, or slips when filing.

The flow mark that flawed the clear canopy in mine and at least three other Lightning kits I know of is a concern, and this may be a wider problem for Airfix (going by the posts I have read concerning similar problems with their 1/24-scale Typhoon). Let's hope Airfix remedies things soon. Meanwhile, I await my replacement canopy with interest.

The kit's Cartograf printed decals are the best I can recall using, and are the icing on the cake where this kit is concerned. They only serve to reinforce what great value it is.

Despite the canopy flaw, I still highly recommend this kit as a most enjoyable and rewarding build. Forewarned is forearmed, so hopefully my constructional observations will help those who have yet to sample this excellent kit; or Airfix's very similar Lightning F.6.



Model Images and Text Copyright © 2014 by Mark Davies



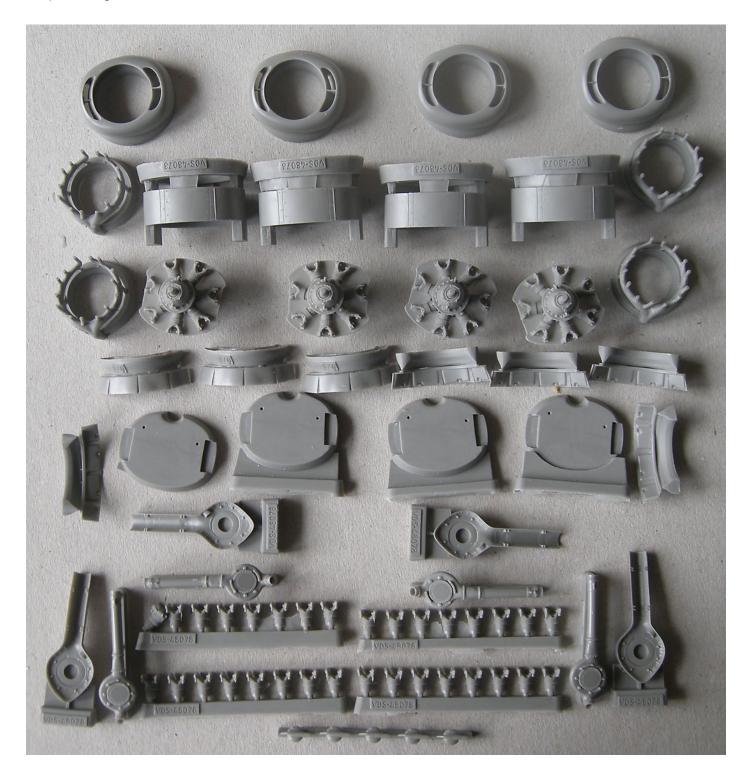


I

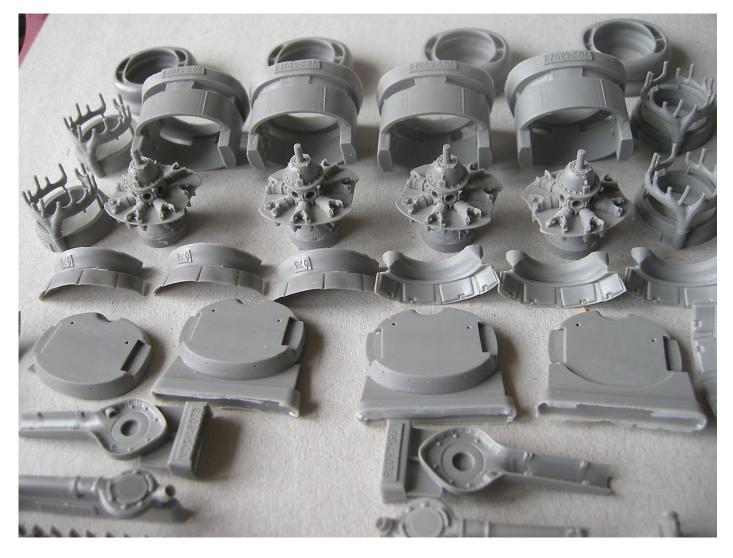
### Resin Round-Up Another 'Peek in the box' by Pete M. Vector's 1:48 B-24 Engine Set VDS48-078.

Having forgone my usual bi-annual trek to Scale Modelworld in the UK last November, I did my aftermarket buying on-line to get some of the resin goodies that I would have usually purchased from the many dealer stands represented at the show.

The set I am about to review had been out of stock at Neomega UK on my last visit, so I've now completed the 'set' that Vector do for the venerable but still nice Monogram/Revell 1:48 B-24D/J kits, a nacelle/wheel well set and the subject of this 'in-box' review, their engine, cowls and turbo supercharger set.



A shot showing what you get with this beautifully moulded resin, as is usual from the Vector stable. Some slight flash is in evidence, but there were absolutely no pin holes visible anywhere in my two sets. Work is required to cut the parts free from the moulding sprues, but these are well marked, and logically positioned.

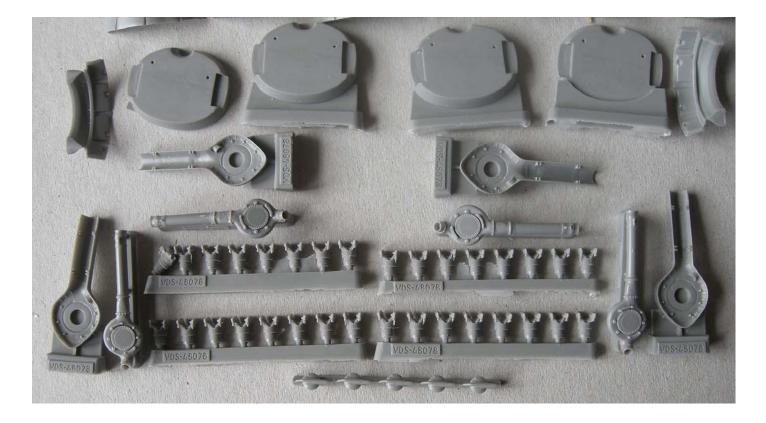




Starting with four refined engine nacelle fronts and intakes, proceeding back to the main engine cowling panels with internal ducting for the intakes, fully detailed cooling gills (moulded in the position), open four R1830 engines with all the cylinders moulded in full relief (just requiring the addition of the pushrods and ignition wiring to be added) a full engine exhaust manifold, and a new 'dishpan' firewall. Note, the engines do not have the rear section and the engine accessories section that would appear on the other side of the firewall.

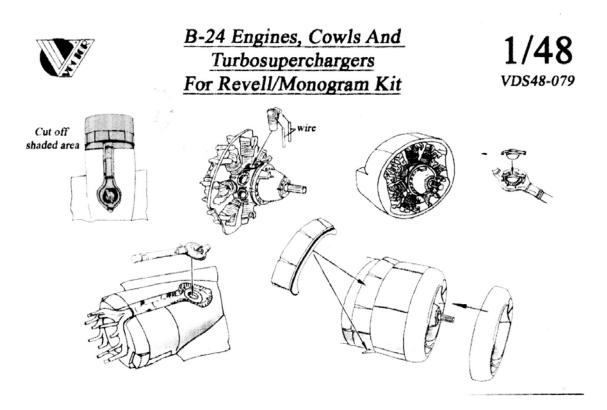


If one really wanted to go 'anal' here, then I'm sure one of Vector's 'complete' R1830's could be shoehorned in with some extra work to the nacelles!





The finishing touch to this set is a complete 3 part turbo supercharger set for the exhaust outlet that is far superior to that provided with the original kit.



The instructions are very basic, just a small sheet showing where to cut the original kit nacelles and external exhaust system off, and assembly detail sketches. Vector provides no colour details, but presume that those using this set will have done their own

research beforehand!

Once again, a great add-on to upgrade these still the only available 1:48 scale B-24 kits.



## Yakovlev Yak-1 1942 Brengun 1/72-Scale - First Look by Mark J Davies



Summary:	
Catalogue Nbr:	BRP72021 – Yakovlev Yak-1 1942
Contents & Media:	Fifty-eight grey, and nine clear styrene parts, four resin parts, one PE fret of fif- teen parts, and decals for three aircraft.
Advantages:	Very good detail, crisp moulding.
Disad- vantages:	It is a pity that a PE set harness was not included in place of less necessary PE items.
Conclusions:	I think this is great little kit, despite its strange use of PE for some areas of surface detail. It is very well detailed, and the moulding is crisp and fine. I do feel that a PE seat harness should have been included instead of a pointless PE instrument panel, but this is not a deal-breaking issue.
	The need for care with the wing to fuselage join is indicated, but this is from the only build article I have read. Overall, the kit appears well engineered.
	Extra cockpit detail and a vac-form canopy are available separately from Brengun to enhance the model, but only make sense to me if an open cockpit is planned.
	Although I do not own one to compare with directly, I am inclined to think this kit is superior to A-Model's Yak-1 kit, if for no other reason than its representation of the fabric covered fuselage structure so characteristic of the real aircraft.
	I happily recommend this kit, and am sure VVS enthusiasts will welcome it.

#### Background

The Yak-1 was maneuverable, fast and well armed, and it was easy to maintain and reliable. It formed an excellent basis for subsequent developments from the Yakovlev bureau. It was the founder of a family of aircraft, with some 37,000 being built.

At the time of the German invasion of Soviet Union on 22 June 1941, 425 Yak-1s had been built, although many were en route or still disassembled. 92 machines were fully operational in the Western Military Districts, but most were lost in the very first days of the war. The Yak-1 was designed with the goal of providing direct coverage of the II-2 attack planes from enemy fighters. Thus, most of the air combat took place below 4,000 m (13,123 ft), at low altitudes where the Yak-1 performed the best. The Yak-1 proved to have a significant advantage over its Soviet competitors. A full circle turn took just 17 seconds in the Yak-1M. The MiG-3, which had the best high-altitude performance, did poorly at low and medium altitudes, and its light armament made it unsuitable even for ground attack. The LaGG-3 experienced a significant degradation in performance (as much as 100 km/ h/62 mph on some aircraft) compared to its prototypes due to the manufacturer's inexperience with its special wooden construction, which suffered from warping and rotting when exposed to the elements. The Yak-1's plywood covering also suffered from the weather, but the steel frame kept the aircraft largely intact.

The aircraft's major problem early in deployment was fuel leaks caused by failure of spot-welded fuel tanks from vibration. Also troublesome was the fact that the canopy could not be opened under certain conditions in earlier models, potentially trapping the pilot in a falling aircraft. As a result, some pilots had the sliding portion of the canopy removed altogether. The first 1,000 Yak-1s had no radios. Installation of radio equipment became common by spring 1942 and obligatory by August 1942. But Soviet radios were notoriously unreliable and short-ranged, so they were frequently removed to save weight.

Like the Rolls-Royce Merlin float carburetor-equipped engines, the M-105 could not tolerate negative G forces which starved it of fuel. Moreover, they suffered breakdowns of magnetos and speed governors and emitted oil from the reduction shaft.

The Yak-1 was better than the Bf 109E, but inferior to the Bf 109F - its main opponent - in rate of climb at all altitudes, although it could complete a circle at the same speed (20–21 seconds at 1,000 meters). In comparison, a Bf 109, with its automatic flaps, had a lower stall speed and was more stable in sharp turns and vertical aerobatic figures. A simulated combat between a Yak (with M-105PF engine) and a Bf 109F revealed that the Messerschmitt had only marginally superior maneuverability at 1,000 meters (3,300 ft), though the German fighter could gain substantial advantage over the Yak-1 within four or five nose-to-tail turns. At 3,000 meters (9,800 ft), the capabilities of the two fighters were nearly equal, as combat was essentially reduced to head-on attacks. At altitudes over 5,000 meters (16,400 ft), the Yak was more maneuverable. The engine's nominal speed at low altitudes was lowered to 2,550 rpm, and the superiority of the Bf 109F at these altitudes was reduced.

The Yak-1's armament would be considered too light by Western standards, but was typical of Soviet aircraft, the pilots preferring a few guns grouped on the centerline to improve accuracy and reduce weight. Wing guns were rarely used on Soviet fighters, and when they were used, they were often removed (as they were from US-supplied Bell P-39 Airacobras). Avoiding wing guns reduced weight and demonstrably improved roll rates (the same was true of the Bf 109F). The US and Britain considered heavy armament and high performance necessary, even at the cost of reduced agility, while the Soviets relied on the marksmanship of their pilots, coupled with agile aircraft. Even with the Yak-1's light armament, to reduce weight, modifications were made both on the front line and on about thirty production aircraft: the 7.62 mm ShKAS machine-guns were removed, retaining only the single ShVAK cannon. Nevertheless, these lighter aircraft were popular with experienced pilots, for whom the reduction in armament was acceptable, and combat experience in November 1942 showed a much improved kill-to-loss ratio. Also, in the autumn of 1942, the Yak-1B appeared, with the more powerful M-105P engine and a single 12.7 mm UBS machine gun instead of the two ShKAS. Although this did not increase the total weight of fire much, the UBS machine-gun was much more effective than the two 7.62 mm ShKAS. Moreover, the simple VV ring sight replaced the PBP gun-sight because of the very poor guality of the latter's lenses. The Yak-1 had a light tail, and it was easy to tip over and to hit the ground with the propeller. Often, technicians had to keep the tail down, which could lead to accidents, with aircraft taking off with technicians still on the rear fuselage.

Nonetheless, the Yak-1 was well liked by its pilots. For Soviet pilot Nikolai G. Golodnikov, overall, in its tactical and technical characteristics, the Yak-1B flown by experienced pilots could meet the Bf 109F-4 and G-2 on equal terms. French Normandie-Niemen squadron selected the primitive model Yak-1M (that had a cut-down fuselage to allow all-round vision) when it was formed, in March 1943. Twenty-four of these aircraft were sent to the elite all-female 586 IAP, whose pilots included the world's only female aces: Katya Budanova, with 11, and Lydia Litvyak (11 plus three shared). Litvyak flew Yak-1 "Yellow 44", with an aerial mast, at first in 296.IAP and then with 73.Gv.IAP, until her death in combat on 1 August 1943. Another ace who flew the Yak-1 was Mikhail Baranov, who scored all his 24 victories with it, including five on a day (four Bf 109s and one Ju 87, on 6 August 1942). The Yak-1 was also the first type operated by the 1 Pułk Lotnictwa Myśliwskiego "Warszawa" ("1st Polish Fighter Regiment 'Warsaw'").

Soviet naming conventions obscure the fact that the Yak-1 and its successors — the Yak-7, Yak-9 and Yak-3 — are essentially the same design, comparable to the numerous Spitfire or Bf 109 variants. Were the Yaks considered as one type, the 37,000 built would constitute the most produced fighter in history. That total would also make the Yak one of the most prolific aircraft in history, roughly equal to the best known Soviet ground attack type of World War II, the IL-2 Shturmovik. But losses were proportionally high, in fact the highest of all fighter types in service in the USSR: from 1941 to 1945, VVS KA lost 3,336 Yak-1s: 325 in 1941, 1,301 the following year, 1,056 in 1943, 575 in 1944 and 79 in 1945.

Source: Wikipedia.org.

#### Previous 1/72-Scale Yak-1 Kits

There have been a few previous Yak-1 kits in The One True Scale; here are those I am aware of, although there are probably others.

Possibly the oldest and most widely available kit dating from 1977is the ZTS Plastyk/Mikro 72 kit, which has been re-boxed by Mistercraft/Mastercraft. Accurate and really quite good for its time, it is looking a little dated now. However, adding Part's PE set and a Falcon canopy can make for a very nice model. The Mistercraft/Mastercraft re-boxings have better instructions and decals than the original.

Armory released a resin Yak-1b kit with PE details. From what I have read about it, this kit is OK with good detail, but has vague instructions and fit of some parts is not the best. KPM released a vacform offering three versions. According to Old Model Kits, it was a high quality vac- kit with fine recessed panel lines. Both of these kits fall outside the gambit of most modellers.

A-Model released a Yak-1 in several versions. Reviews I have read indicate that this is a good kit, and that it builds well for limited run offering, although some criticise it for its lack of scalloped fabric-covered areas on the rear fuselage. The most modern offering of this group, it was also probably the best all-round proposition, until now maybe...

#### The Contents

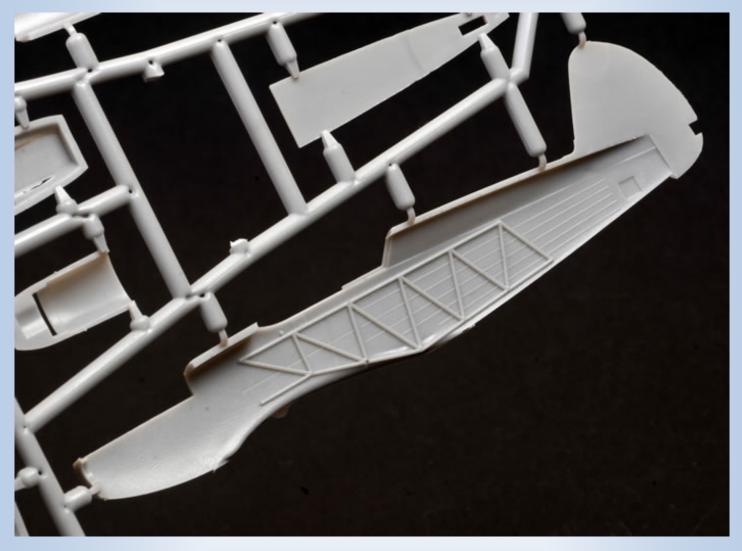
The kit comes packed in a small box which has more than ample room for the compact contents. The box features artwork on the front and a quite small four-view colours & markings guide on its rear for three aircraft. Three grey sprues are enclosed within a re-sealable cellophane bag, with the decals, some resin parts, a PE fret and clear sprue further enclosed in a small bag of their own.

The instructions consist of a single folded A4 sheet giving four pages. They feature a parts map and well drawn assembly drawings. Text is in English and Czech. Scans of the instructions are included in the gallery images below.

#### **New Style Tooling**

Most Brengun kits have been moulded in a tan coloured styrene, whereas the Yak-1's are grey, and appear different in tooling style. This is noticeable where the parts frames and gates are concerned, and I think that surface detail and smaller parts appear crisper and more cleanly moulded than before. It is likely Brengun has used a different third party toolmaker and producer, or their current partner has changed their tooling method.

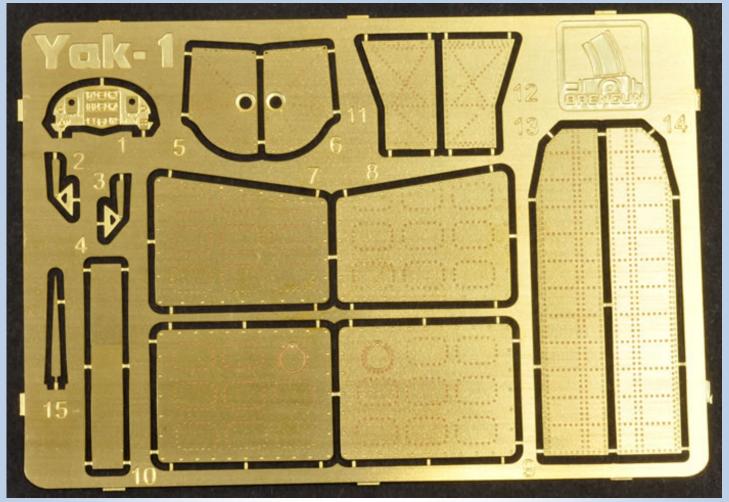
The sprues themselves have a tiny hint of flash in one or two places, but generally have a long-run appearance despite being limited run in nature due to the lack of locating pins etc. The clear parts are well done, and the resin and PE parts are of the good quality normally associated with Brengun.



#### The Kit Breakdown

The kit is available in two boxings, the other being <u>BRP72020</u> Yak-1 1941, has the same parts but features a slightly different style of rear canopy section. Although not indicated, Brengun could offer a different fuselage sprue featuring the later Yak-1b's low-back and bubble top canopy.

The first thing I noticed with this kit was the unusual large area recesses in the lower wing that are designed to receive inlaid PE panels (which I presume are the bottoms of the fuel tanks in the wings). The rivet detail on the PE inserts is no finer than moulded detail elsewhere on the kit's surface, so the reason for this approach is unclear. It occurred to me that it might be intended as a way to accommodate variations in underwing panel detail between versions; but after checking my references I found these panels have a different outline shape altogether on the Yak-3 and Yak-7, for example. Despite their apparent added complexity, a build article I read said they presented no problems.



Returning now to a more conventional review sequence, I shall mention the cockpit...

This is very nicely done, with quite a number of parts and very good levels of detail. The instrument panel is provided as a solid PE item; that is to say without open dial faces and a photo foil. As such, it offers no more detail than could have been moulded judging by the crisp styrene detail elsewhere in the kit. Yet despite the seemingly profligate usage of PE elsewhere, there is no PE harness to garnish the very nicely represented seat. The reason would seem to be that Brengun offers a small PE <u>cockpit detail set</u> that includes a harness, as well as an instrument panel with open dial faces (but no photo-foil). I think the harness should have been included with the kit at the expense, if necessary, of the pointless solid PE instrument panel. In addition, a gun-sight sits on a cross-fuselage brace as was characteristic of many Soviet WW2 fighters.

The nicely moulded canopy comes in three parts, but this cannot not be positioned open as the centre sliding section will not sit over the rear portion. However, Brengun offers a separate <u>vac-form canopy</u> that is ideal for an open canopy model.

The fuselage is a bit of multi-part affair with the two main halves, a rear underside section (moulded separately to incorporate the fabric covered structure), and again for tooling reasons, a separate top to the cowling and oil-cooler intake for its underside. The oil-cooler matrix is provided as a resin part with



some delicate detail. There is a choice of two styles for the lower section to the rudder's trim-tab, but no guidance as to which colour scheme option each is intended. There are individual exhaust pipes to add to the engine cowl, which capture the fine and almost delicate look of the originals.

The instructions advise to remove trim off most of the tailplane's locating tabs for them to fit the blind locating recesses within the fuselage. This is probably the best approach, but some may prefer to open the recesses and use the full area of the locating tabs.

The wings include integral wheel well detail on the inside of their upper surfaces, and have separate wheel-well enclosures to sandwich between the wing halves. A nice touch is the clear landing light and wingtip nav-lights. The radiator bath is separate, and includes a moulded insert and resin matrix face. The lip for the carburettor air intake is a separate part that snuggles into the port wingroot. I think this is a very effective solution to what can otherwise be a tooling challenge with kits of Yak fighters.

PE is again used to represent the flaps, and these fit into a recessed area in the same manner as the fuel tank undersides mentioned earlier. Like the fuel tank faces, there is no obvious reason for this approach, as the flaps are not suitable to pose lowered due to a complete lack of internal structure detail.

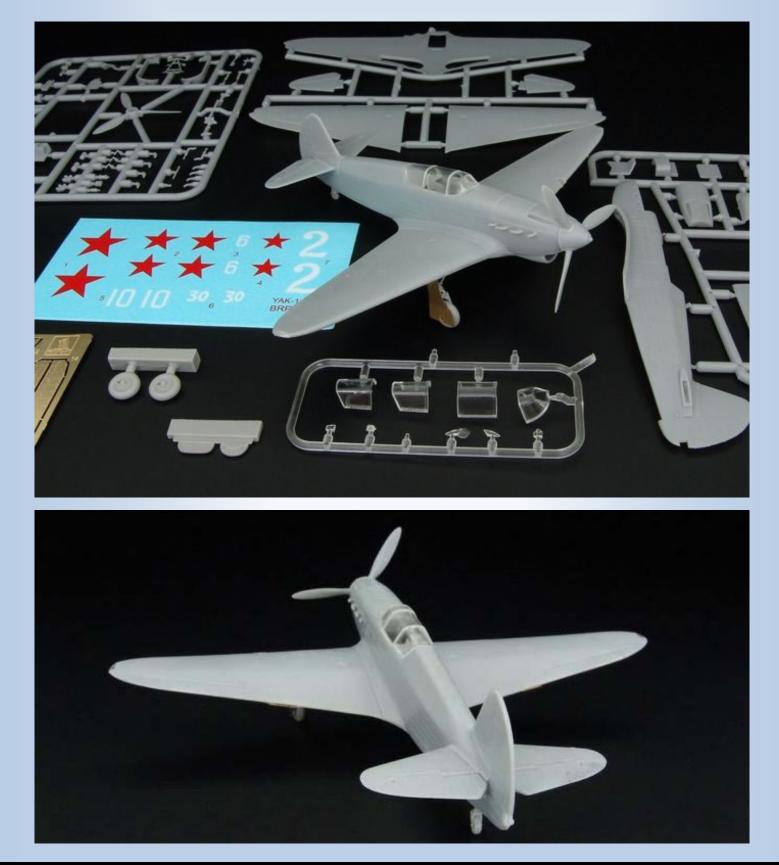
The undercarriage is particularly well executed, capturing nicely the somewhat complex shape of the main legs and their retraction arms. The main and tail-wheel leg all have separately moulded torque links to add. The main wheels are resin, and the undercarriage doors are PE, which makes good sense.



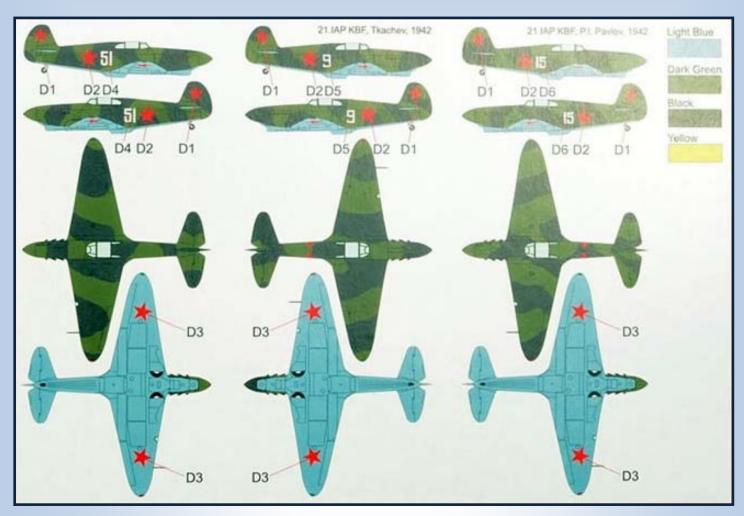
All that remains to mention concerning parts is a propeller with separate spinner and a pitot for the wing.

A build article I read indicated that general the fit is good, but that there are issues with the wing to fuselage join. It seems that if the wings are correctly aligned with the roots on the fuselage one is left with a gap at the front of the join, or if fitted to eliminate this gap there is a step at the rear of the root. Obviously, some dry fitting and fettling may be necessary.

The change in tooling style is a definite improvement on Brengun's previous but still worthy kits, as the Yak-1 has far less of a limited run feel to it than previous releases.







The decals are crisply printed with good registration, and colour density looks good.



#### Conclusion

I think this is great little kit, despite its strange use of PE for some areas of surface detail. It is very well detailed, and the moulding is crisp and fine. I do feel that a PE seat harness should have been included instead of a pointless PE instrument panel, but this is not a deal-breaking issue.

The need for care with the wing to fuselage join is indicated, but this is from the only build article I have read. Overall, the kit appears well engineered.

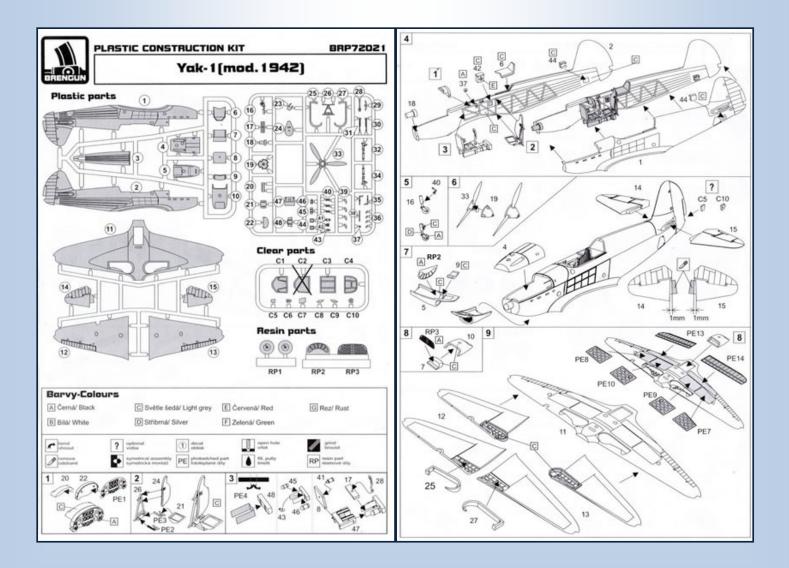
Extra cockpit detail and a vac-form canopy are available separately from Brengun to enhance the model, but only make sense to me if an open cockpit is planned.

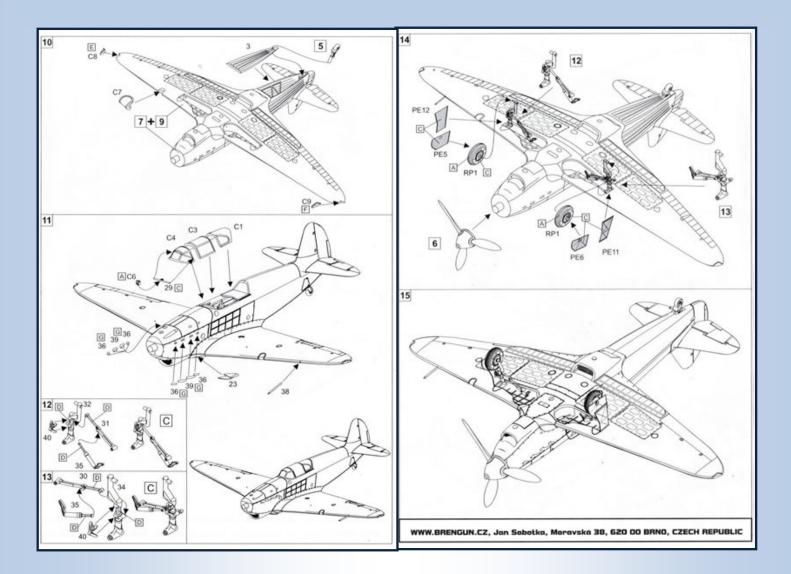
Although I do not own one to compare with directly, I am inclined to think this kit is superior to A-Model's Yak-1 kit, if for no other reason than its representation of the fabric covered fuselage structure so characteristic of the real aircraft.

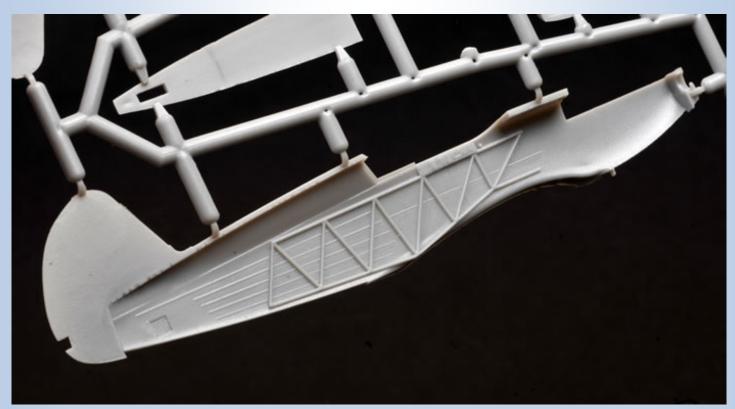
I happily recommend this kit, and am sure VVS enthusiasts will welcome it.

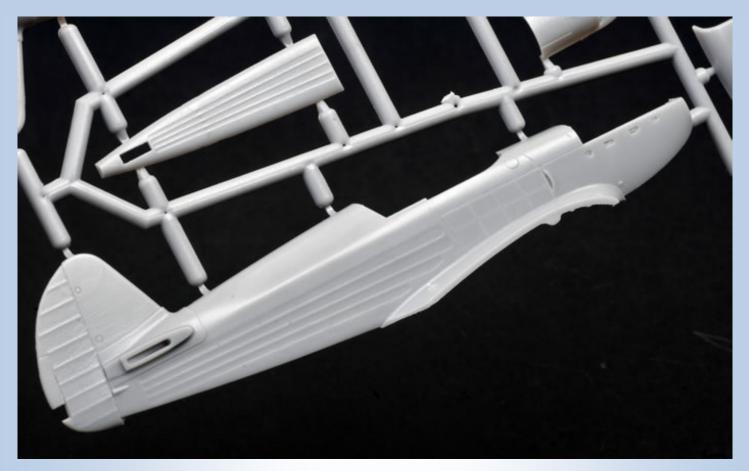
Thanks to Brengun for the review samples.

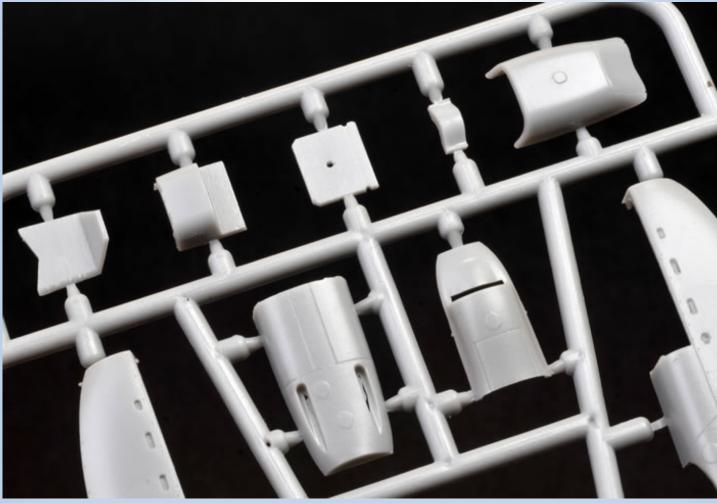
Review Text Copyright © 2016 by Mark J Davies

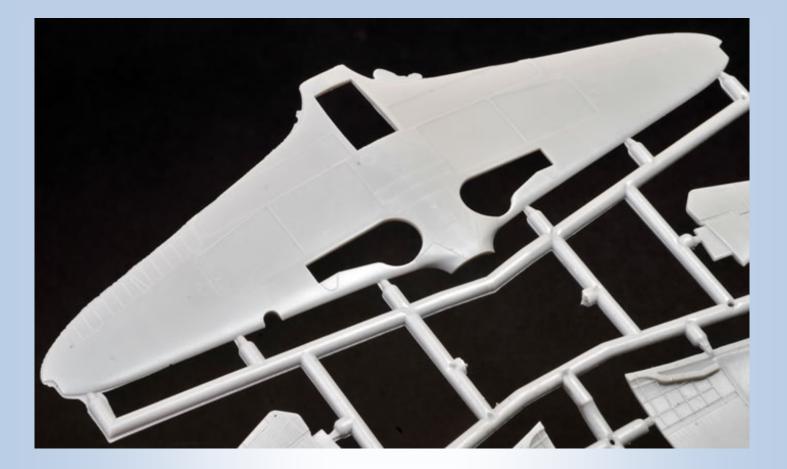


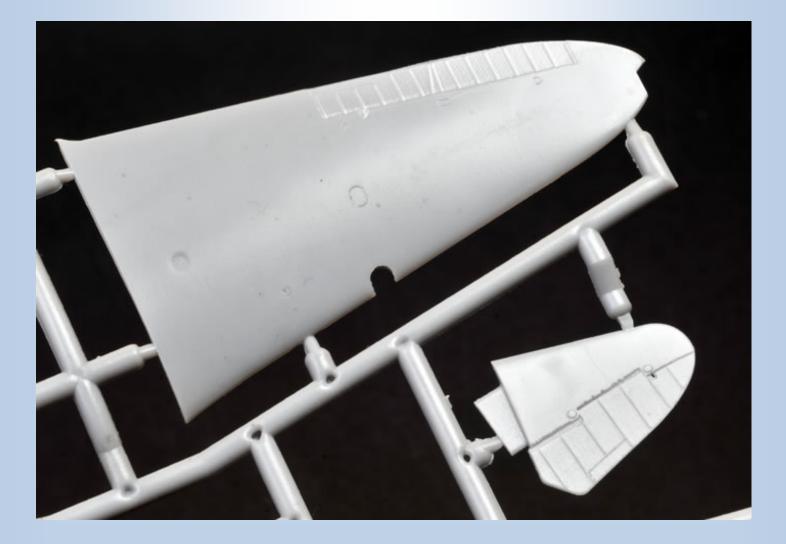


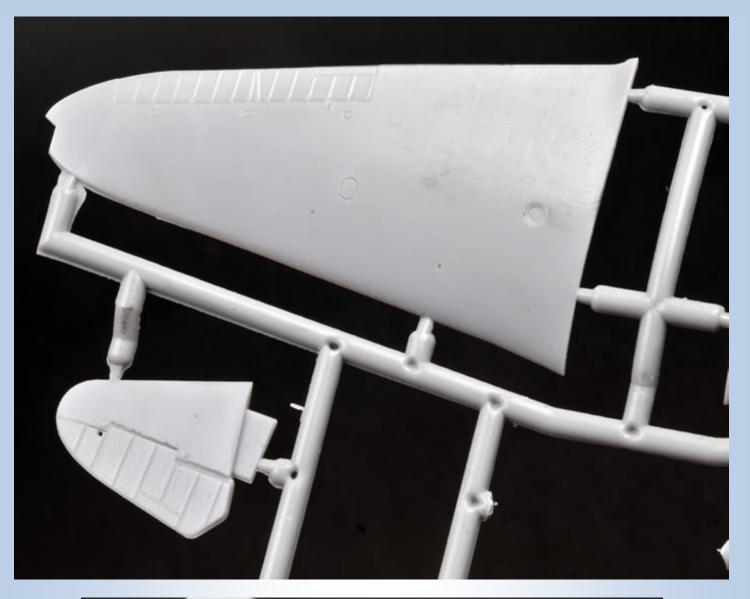


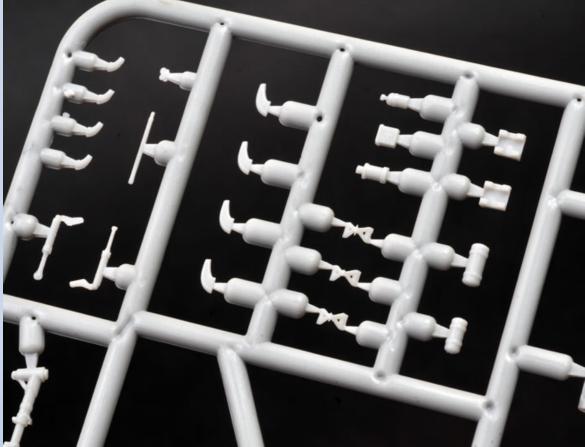


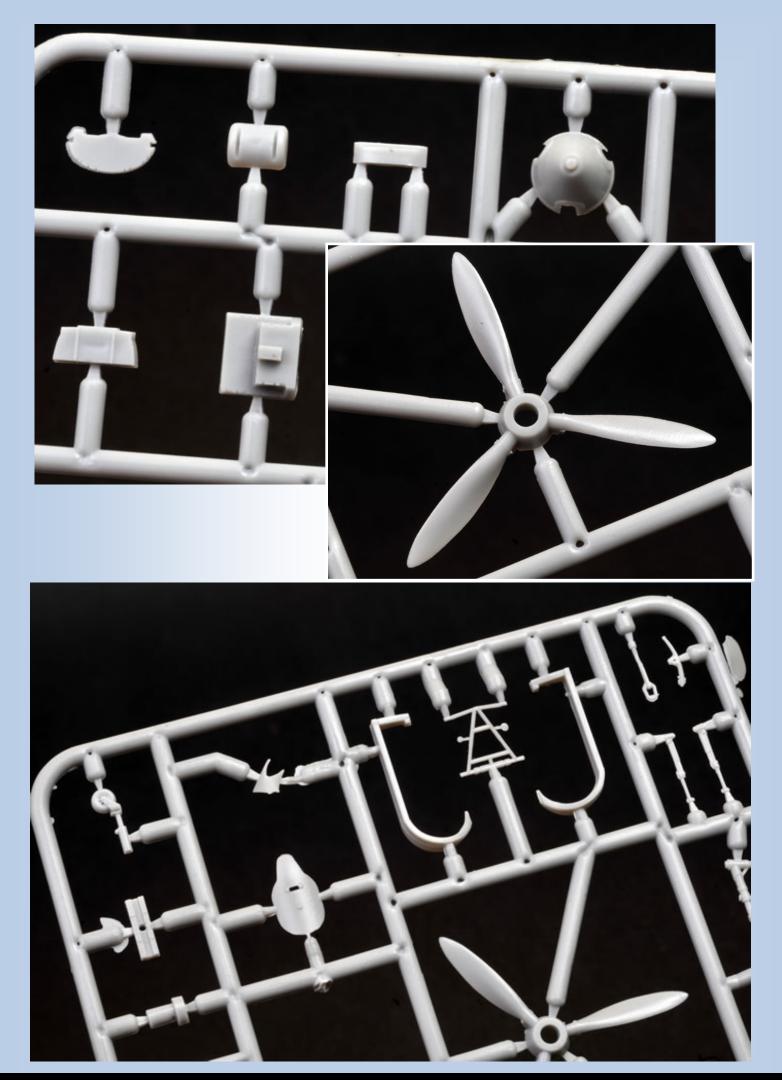












## Check out our Website gallery for photos taken of models at our monthly meetings

GALLERY

**CLUB NIGHT MODELS** 

#### 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.

