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NEXT MEETING

SEPTEMBER

Tuesday 20th September

Leys Institute (upstairs)

20 Saint Marys Road

Ponsonby

COMMITTEE

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Secretary - John Lance Whitford
Swarbrick

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The Chairman's Bit

Spring is in the Air!

Hopefully your sap is rising and models are blooming from your work-bench. Some of us model best in the cold of winter while others like the bright natural light of a New Zealand springtime to help finish off our latest creations. Whatever, this month's meeting is a busy one!

Model of the Year Competition

Bring along the model that you have finished in the last 12 months that you think is your best work. This will be judged by vote from the members, with categories to be decided on the night depending on how many models are on the table. There will be prizes, the value of which will be decided by the committee in the pub before the meeting.....

BSK Competition

You need to max the time you are spending on your Mini in order to get it finished by December. Bring along your in-progress kits so we can see how far behind the rest of us are falling.....

Shelf Of Doom

The clock is ticking on this one too, again to be completed by the Christmas meeting to be eligible for a prize. Let us all see how far along you are on your noble rescue mission.

Practical Topic - Canopies

This month we are going to talk about the subject of canopies. Yes it is perhaps more relevant to aeroplane modellers but the techniques will transfer to cars and AFVs in some instances.

It would be great if you could all contribute, and bring along examples of your work in full kit form or in parts because it makes the topic much more visceral if we can see and perhaps handle examples of work.

Cheers

Mark R

The NZ motorcycle show



This event attracted thousands of visitors with excellent exposure for the club. There was a constant stream of visitors the IPMS site which was organised and manned by our own road warrior—Mike Maran.

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

12 Kent St Newmarket
Auckland
p: 09 520 1236
10% on kits



Stoker Models

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10% on kits and modelling supplies



TOYWORLD

Toyworld Henderson
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15% Off the normal retail price on:

- All models and modeling accessories
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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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BULLETIN BOARD

NEW MEMBERS AND SUBS *** 2016/17 DUE *******

Subs for 2016/17 now PAST DUE - see below for club account details or see the club secretary at the next club meeting.

Membership	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 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

- September 20th 2016 - IPMS Auckland Club Night. Practical Session – Canopies
- October 18th - Auckland Club Night.

MODELLING EVENTS

[Armistice in Cambridge 2016](#)

Might River Domain

Lake Karapiro

Cambridge

12th and 13th of November 2016

Saab J.32B/E Lansen

Tarangus, 1/72 Scale
Reviewed by Mark J. Davies

1/72 scale

TARANGUS



SAAB J32B/E Lansen

Swedish Air Force fighter & electronic warfare aircraft

Summary:

Catalogue Number:	TA7202 - Saab J.32B/E Lansen
Scale:	1/72
Contents & Media	Seventy-one grey and four clear styrene parts, and decals for four subjects.
Availability (on-line)	Available on-line from Hannants - £24.99 , West Coast Hobbies - Can\$45.00 , Hobby Link Japan - ¥5,130
Review Type:	First Look.
Advantages:	Covers the J.32B & E variants, refined surface detail, very good decals.
Disadvantages:	Closed airbrakes, no ECM stores.
Conclusions:	Eduard's Fw 190A-5 is the best in 1/72 scale by a long measure, and is a superb example of the 1/72 kit maker's art. I think it represents great value and cannot recommend it highly enough.

Conclusions

A modest advance over the 34 year old Heller Lansen, it at least covers different versions to compliment the A&C variants offered by the French kit.

The lack of deployed airbrakes is major flaw that really lets the kit down.

For its price the kit it should have included PE airbrakes and some ECM stores for the J.32E option.

Although of questionable value, I recommend it because it enables a J.32B or E to be built from the box for about the same price as converting the Heller kit using Maestro Models' conversion set, whilst some detail benefits and better decals give it a slight advantage over the conversion option.

Background

In late 1946, Saab began internal studies aimed at developing a replacement aircraft for the Saab B 18/S 18 as Sweden's standard attack aircraft. In 1948, Saab was formally approached by the Swedish Government with a request to investigate the development of a turbojet-powered strike aircraft to replace a series of 1940s vintage attack, reconnaissance and night-fighter aircraft then in the Flygvapnet: the B 18/S 18, J 21R/A 21R and J 30 (de Havilland Mosquito). Out of several differing design studies performed, including a twin-engine aircraft intended to be powered by a pair of de Havilland Ghost turbojet engines, Saab settled on a single-engine design, which was initially designated the P1150.

On 20 December 1948, a phase one contract for the design and mock-up of the proposed aircraft was issued, formally initiating development work upon the P1150. The requirements laid out by the Swedish Air Force for the P1150 were demanding: it had to be able to attack anywhere along Sweden's 2,000 km of coastline within one hour of launch from a central location. It had to be capable of being launched in any weather conditions and at day or night. In response, Saab elected to develop a twin-seat aircraft with a low-mounted wing, and equipped with advanced electronics. The P1150 would break new grounds for the Swedish Air Force, being their first two-seat jet aircraft, and the first to carry a built-in search radar.

Saab had initially envisaged powering the P1150 with the indigenously produced STAL Dovern turbojet engine. However, both timescale and technical difficulties encountered during the development of the Dovern resulted in the Swedish government electing to substitute the intended Dovern engine with the license-built Rolls-Royce Avon Series 100 turbojet engine, designated RM.5, instead. The single Avon engine provided the Saab A.32A with a thrust to weight ratio of about 0.3, and enabled the aircraft to be roughly 10,000lb heavier than the twin engine Saab 18 it replaced; the later-produced J.32B interceptor and S.32C reconnaissance variants received the upgraded and significantly more powerful RM6A Avon engine instead.

On 3 November 1952, the first P1150 prototype conducted its first flight. The design of the prototypes had initially featured both Fowler flaps and a leading edge slot; this slot was discarded as unnecessary after trials with the prototypes and never appeared on subsequent production aircraft. Triangular fences were added near the wing roots during flight testing in order to improve airflow when the aircraft was being flown at a high angle of attack. A small batch of P1150 prototypes completed design and evaluation trials with series production of the newly designated Saab 32 Lansen beginning in 1953. Development work on the project was recorded as having involved more than 2,000,000 man-hours in total.

In Development 1955, the first production A.32A Lansen attack aircraft were delivered to the Swedish Air Force; deliveries of this variant proceeded through to mid 1958, at which point manufacturing activity switched to the other two variants of the Lansen, the J.32B and S.32C. These two models differed substantially from the first, the J.32 B being fitted with a new engine for greater flight performance along with new navigation and fire control systems. On 7 January 1957, the first J.32 B Lansen conducted its maiden flight; on 26 March 1957, the first S.32C Lansen performed its first flight. Production of the Lansen continued until May 1960.

The J.32B was an all-weather fighter version initially operated only for bad weather and night fighter duties. Two prototypes and 118 production aircraft built between 1958 and 1960, retired in 1973. Armed with four 30 mm ADEN guns, Rb 24 missiles (license-built AIM-9 Sidewinder), or 75 mm unguided rocket pods, the J.32B was powered by a more powerful Svenska Flygmotor RM 6A (Rolls-Royce Avon Mk 47A) engine.

The J.32E was an electronic warfare and countermeasures (ECM) version also used for ECM training. Fourteen J.32B were modified to J.32E standard, and retired in 1997. The aircraft was equipped with jamming system G 24 in one of three versions (for L, S or C bands) used for jamming ground and naval radars. Additionally Adrian (for S and C bands) and Petrus (for X band) pods were used for jamming aerial radars.

Source: Wikipedia

SAAB J32B/E Lansens



Previous 1/72-scale Lansens

Beauty is in the eye of the beholder, but I think many would agree that the Lansen is a handsome and interesting design that has been rather overlooked by kit makers. This is probably in largely due to it only ever having a single small air force operator.

I am only aware of one previous Lansen kit in The One True Scale, and that is this classic Heller kit which covers the 'A' attack and 'S' reconnaissance versions (A.32A & S.32C respectively). Like many Heller offerings from the early 1980s, this is still a good kit. I built one 12 years ago when I converted it to a J.32B, scratch-built the airbrakes, and re-scribed the quite fine raised surface detail. As I recall everything fitted very well. The kit has a couple of failings; the air-brakes are moulded shut when they should always be deployed with the undercarriage down, and the optional but very characteristic external belly tank is not supplied. Its weak points are the absence of any underwing stores and often poor quality decals (in early boxings in particular).

I have seen mention of a full A.32 Lansen kit by AA Models, but can find no details whatsoever about it.

Although not a kit, I should just mention that Maestro Models produces a resin J.32B conversion for the Heller kit, which provides the open 30mm cannon blast troughs, new afterburner nozzle and belly tank.

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Source: Wikipedia

First Look

The Contents

The kit appears to have been produced by Sword as the sprues and instructional format bear a very strong resemblance to this brand's products, or at least by the same injection moulder that Sword uses if they contract out.

The kit comes in an end-opening box with digital artwork on the front and three colour profiles on the rear. The instructions provide a parts map, and an easy to follow diagrammatic assembly format in the same style as Sword's kits. There is also a brief history of the aircraft. All text is in English. Painting and decal guides are printed in colour with some useful notes covering likely markings characteristics. Paint colours are cross-referenced to FS 595, and paint ranges from Humbrol, Gunze Sangyo and Tamiya. This is a big improvement compared to the Tarangus SAAB J 29 I reviewed about three years ago. A two-page, four-view stencil placement guide is also provided.

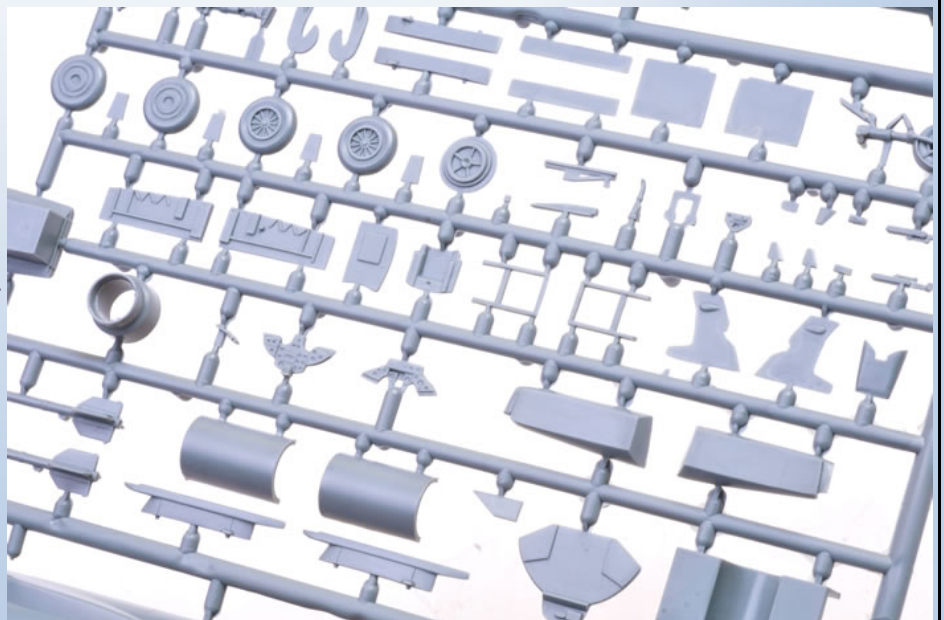


The two main sprues come in a zip-lock bag, with clear parts and decals further protected in their own bags. Although of limited run nature, all parts are well moulded with very fine and crisp surface detail. The parts break down is conventional, with narrow sprue gates. Some flash is visible in some places, particularly the combined nose wheel and leg, but this can be easily dealt with. There are some prominent ejector pin marks that, with one exception, do not interrupt moulded detail.

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The Kit

The cockpit detail is reasonable, representing a modest advance on Heller's kit. Seat harness and firing handle detail really needs to be added, either scratch-built or courtesy of Maestro Models PE detail set. Clear panels that fit either side of the seat headrests and a clear blast-screen for between the seats are provided. The single piece windscreen and canopy is nice and clear.



A reasonably well detailed nose-wheel bay fits beneath the cockpit sub-assembly, and there is an insert that fits some way behind the cockpit to provide main wheel bay detail (marred somewhat by ejector pin marks). Both nose and main wheel well detail is quite an improvement over the Heller kit's. Unfortunately, the same cannot be said of the main wheels, which have some slight out-of-round distortions to the hubs and off-centre rims. I feel resin wheels would have been a better option. The prominent pair of landing lights that fit in the nose wheel bay are moulded in grey styrene, where clear would seem to have been a better choice; but this is small issue.



As with Sword kits, the instructional drawings sometimes illustrate the parts as having more detail than is actually moulded. This is the case with the tail-bumper and exhaust nozzle, which if made from resin could have captured the detail missing from the injected parts.

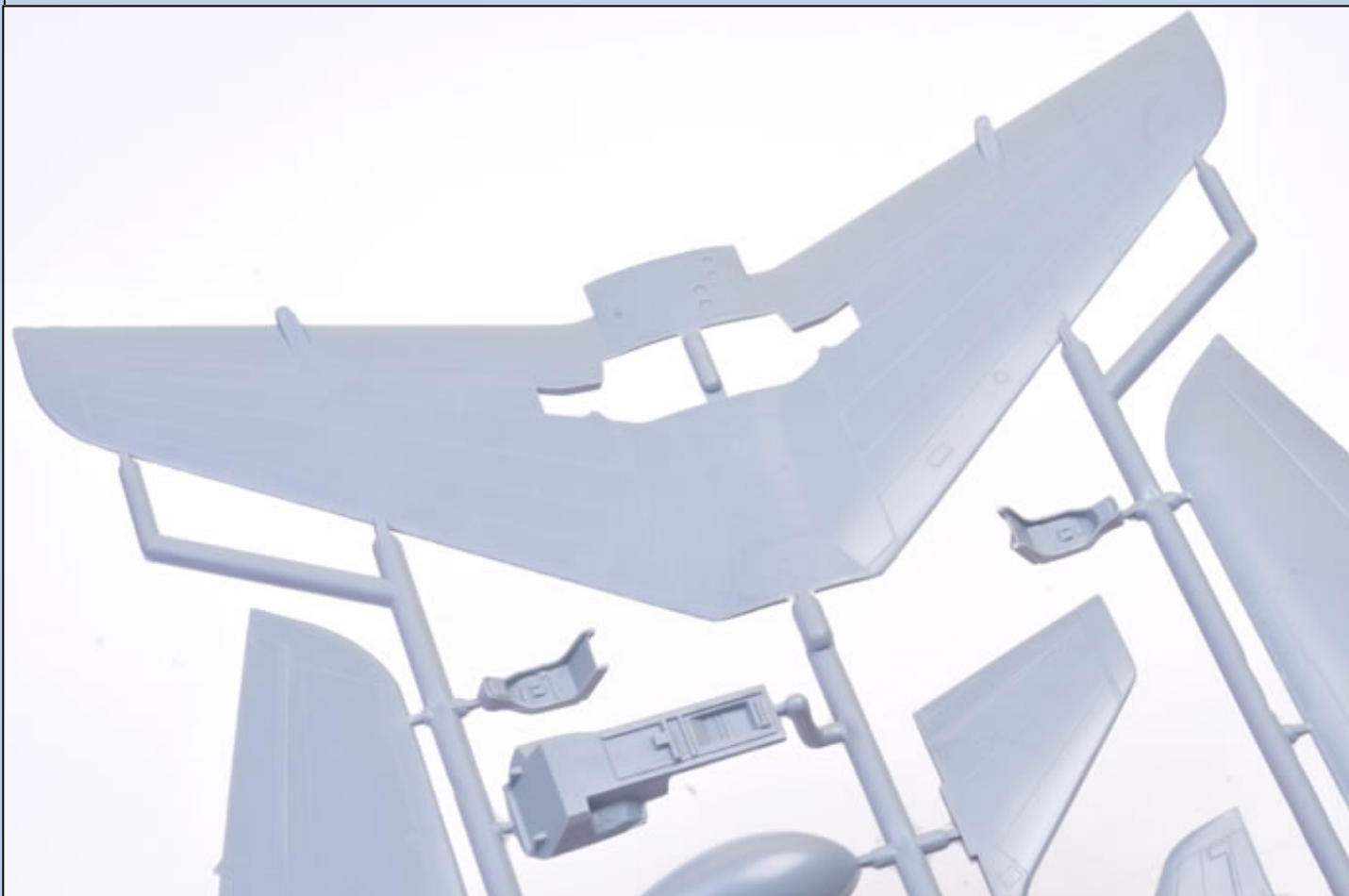
The air intakes are nicely done with extended intake trunking included with the boundary layer splitter plates. This longer trunking is an improvement on the Heller kit's, which is quite short.

The fuselage halves enclose the cockpit, wheel well, and afterburner sub-assemblies. The model will need some nose ballast added as well (something the instructions fail to mention). There are some small scoops to add to the dorsal fuselage, again drawn far better than they are moulded; in fact, they would have to be cast in resin to look as good as the instructional drawings, given the kit's limited run tooling constraints.

There are several blade antennae to fit to the fuselage, but be careful of simply following the instructions as these fail to advise which are only applicable to the J.32E ECM variant; the painting guide gives a better indication of the differences in antennae locations.

Some may wish to improve the definition of the cannon blast troughs which are rather shallow and fail to penetrate the fuselage due to tooling limitations. Fortunately, and unlike Heller, Tarangus include the external belly tank. The horizontal and vertical stabilizers are all that is needed to finish the fuselage off.

The wings are straightforward with quite fine trailing edges. They have separate small wing fences and what appear to be blade antennae inboard near their roots. The wingtip pitot is again illustrated as a more refined item than that supplied, and is best replaced with a scratch-built or aftermarket item by Maestro or Master.



Four underwing stores pylons are provided, two with Rb 24 missile rails fitted. The only stores supplied are a pair of Rb 24s (AIM-9 Sidewinder). This is disappointing, as it would have been nice to have had a Petrus/Adrian jamming pod and a BOZ 3 chaff dispenser for the E variant (both available from Maestro Models), as well as additional stores pylons.

The kit matches the Heller kit perfectly in outline and dimension, except for (and correctly) the area around the exhaust nozzle where the B/E differs from the A/C variants. This unsurprising as no doubt a re-scribed Heller kit formed the basis of the master. I have never read of any criticism of the Heller kits outline accuracy, so this is a good thing. I am aware that the B/E variant did have slightly modified air intakes from the A/C to feed the more powerful engine; although I have yet to determine what and how significant in appearance the difference is.

The biggest and unforgivable error with this kit is that there is no option for deployed airbrakes. The Lansen has four distinct airbrakes that extend from the fuselage behind the wing when the undercarriage is lowered. Yes, the Heller kit has the same problem, but it is a French company's product from 34 years ago, whilst Tarangus is a modern Swedish concern offering a fairly expensive kit - It costs more than double the price of similar Sword kit like the F3D Skyknight, which is a similar size and also lacking PE or resin detail parts.

Fortunately, Maestro Model's Lansen A/C detail set for the Heller kit has the deployed airbrakes, and will suit the Tarangus kit equally well. The downside is that this is an expensive set, costing around half the Tarangus kit's price.

Had this been a Sword branded kit I think it would either be slightly less than half the price for a kit of the same standard; or cost almost as much, but have included deployed airbrakes and other PE details, and possibly some resin parts too. I do not mean to be harsh, but it seems Tarangus's current business means their kits will be comparatively expensive compared to equivalent Czech-branded ones, as presumably there

Colours & Markings

Four decal options are provided, three J.32Bs and one J.32E, as shown below:

Painting and decalling guide.

Closest matching colours:

- Olive green 325M** (J32B upper and lower side)
Gunze Sangyo 1060 Tamaya XF-61 FS34079
Humbrol 116
- Dark olive green 328M** (J32B/E only)
Gunze Sangyo 1052 Tamaya XF-13 / XF-62 F
Humbrol 7
- Dark blue 438M**
Gunze Sangyo 1055 Tamaya XF-17 / XF-63 F
Humbrol 27
- Blue Grey 656M**
Gunze Sangyo 1053 Tamaya XF-66 / XF-67 F
Humbrol 175
- Black / antracit**

NOTE!
The rear part of the lower fuselage was unpainted metal. See stenciling page for information.

Aircraft information:
32532, J 32B, F12 - 32 from Kalmar wing during the autumn exercise in 1968 marked with the Ö68 squares. Use early type of stencils "a" on decals sheet. It may be possible that the aircraft was marked with the reduced size of the national insignias (B) on the wings.
32536, J 32B, F1 - 36 from Hässlö/Västerås wing.
32615, J 32B, F4 - 15 from Frösön/Östersund wing, early 1970ies. This aircraft had earlier been marked with the Ö68 squares (fluorescent red) that left covered areas in a unbleached condition compared with the rest of the airframe. Use early type of stencils "a" on decals sheet. It's likely that the aircraft was marked with the reduced size of the wing surface national insignias (B) that were introduced 1968. It was also fairly common not to remove the red squares on the bottom side of the wings. After 1969, F4 was the only wing to fly J 32B until the when it was replaced by J35D Draken (from F10).
32507, J 32E, F16 - 01 from Uppsala wing, Jamming aircraft 1996. Use late type of stencils "b" on decals sheet and small national insignias. This airframe was later placed on a stand at the highway E4 close to Linköping.

The decals are printed very nicely, and look to be very good quality. They include extensive stenciling and include the red panels and checkers applicable to two of the options. I have read that the decals perform very well when applied.

TA7202 J 32B/E Lansen

1x 1x 2x 3x 4x 5x 6x 8x 10x 10x 11x 12x 13x 14x 15x 16x 17x 18x 19x

19x 20x 21x 22x 23x 24x 25x 26x 27x 28x 29x 30x 31x 32x 33x

34x 35x 36x 37x 38x 39x 40x 41x 42x 43x 44x 45x 46x 47x 48x 49x 50x 51x 52x 53x 54x 55x 56x 57x 58x 59x 60x 61x 62x 63x 64x

Additional squares

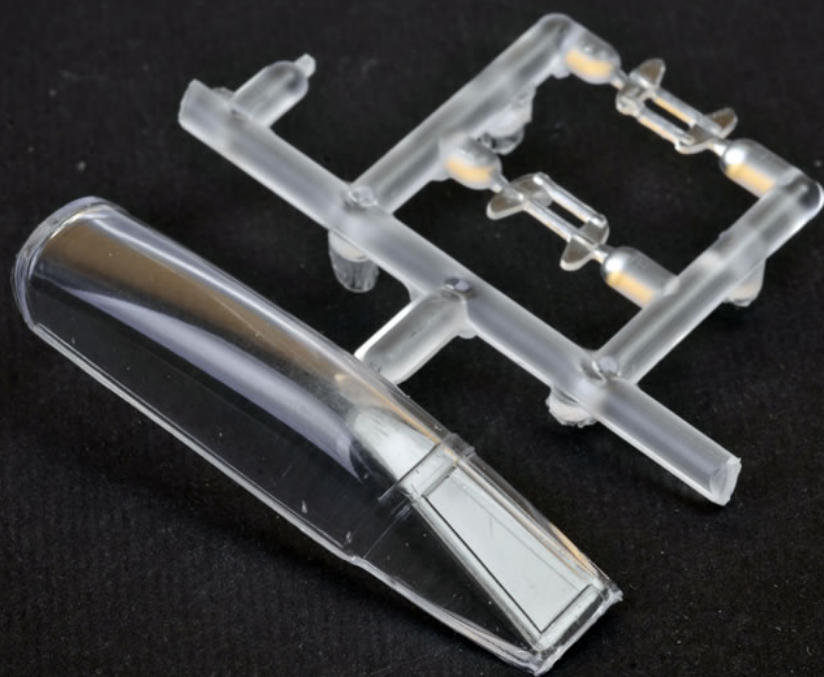
Conclusion

Wisely, Tarangus chose to offer the J.32B & E to compliment the Heller kits' options of the A & C variants, although the Heller kit is easily converted to a J.32B/E using the Maestro Models conversion. I was very hopeful that their 1/72 scale offering would be distinct advance on the Heller.

When comparing the Tarangus and Heller Lansens the new kit offers nice recessed panel lines in place of the older kit's fine raised detail, marginally better cockpit detail, superior wheel well detail (that is diminished by misshapen main wheels), a belly tank, two Sidewinders, and vastly superior decals. Sadly, this is not as much of an advance in 34 years as I hoped for, especially when the new kit costs around two to four times as much as the Heller kit does second hand.

The Tarangus J32B/E costs a little more than converting the Heller kit to a B or E variant using a Maestro Models conversion; but has the advantage of recessed panel lines and fractionally better internal detail. This makes sense, and I can recommend it on this basis.

But if to build the Lansen with its wheels down correctly will cost half as much again to fix the lack of airbrakes, or they must be scratch-built; whilst a J.32E will look a bit bare without jamming pods etc, which again implies additional expenditure. These are things that a modern kit at this price should have included in my opinion.



Had Tarangus included deployable PE airbrakes with the kit then I would be declaring all is well, and that the new kit is indeed a major advance on Heller's. As things stand, Tarangus has definitely bettered the Heller kit, but at a price premium that brings its value into question.

Thanks to Tarangus for the review sample.

Review Text & Comparative Images
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Sprue Images Copyright © 2016 by
Brett Green



KV-1 w/Applique armour

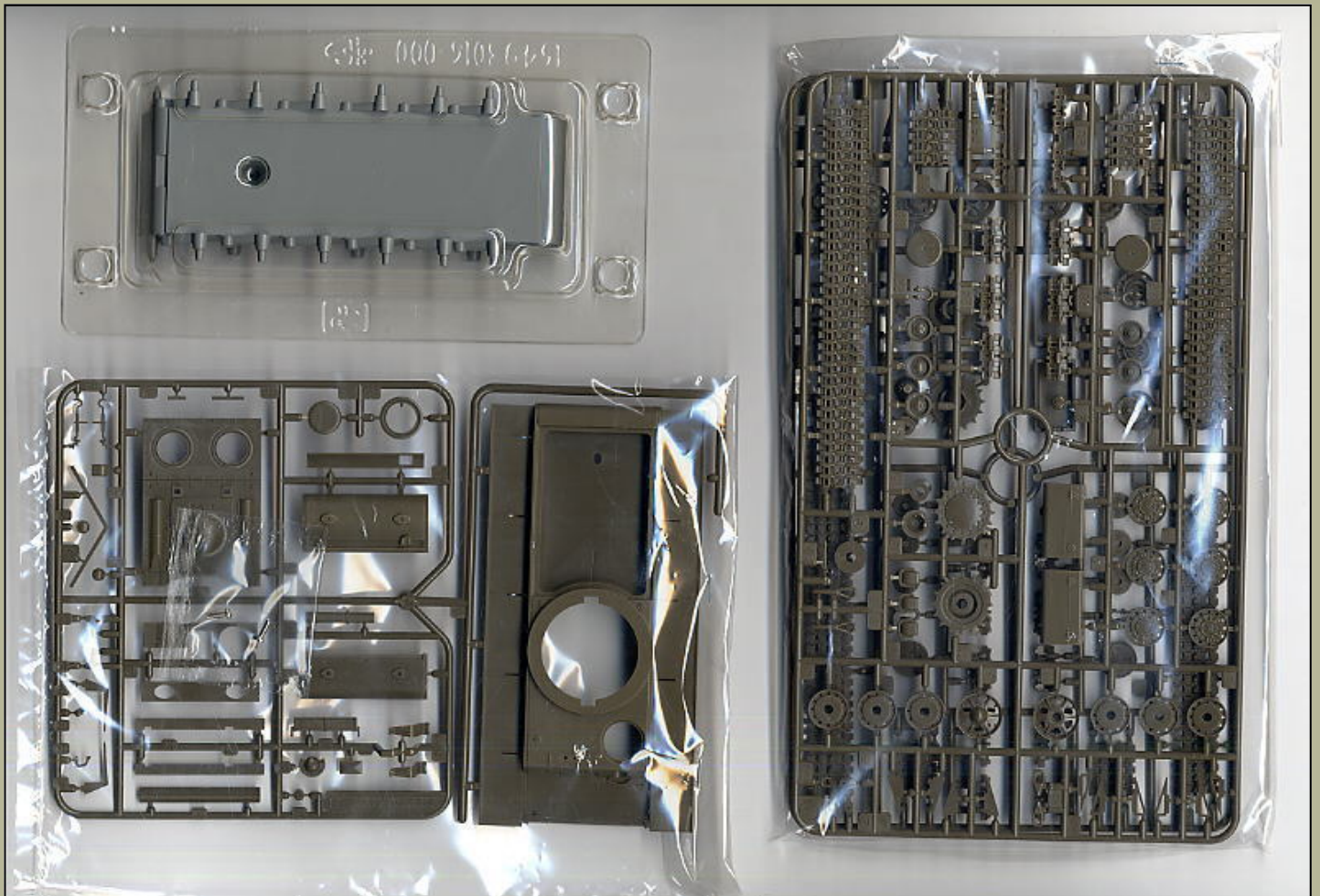
Tamiya 1/48-Scale

By Lance Whitford



I have recently picked up a few 1/48 scale kits which I intend to build largely as painting and finishing projects. The first one I have finished is Tamiya's KV1 – with Applique armour. As with most Tamiya kits the build is straight forward and the engineering is excellent. The only downside from my perspective is the metal hull tub. Tamiya for some unknown reason decided that their 48th armour required a bit of presence and so most of their early releases in this scale come with die cast metal hull tubs to add a little weight. Tamiya have moved away from this idea on later kits by offering optional metal ballast plates to serve the same purpose in a fully plastic hull. The biggest drawback of the cast metal tub is that the suspension arms are integral to this part and are fixed meaning the kit suspension cannot be adapted to follow any uneven terrain. To be fair the link and length track would have to be replaced with aftermarket parts to do this if the suspension was adjustable.

I decided to build the kit out of the box with the aim of the build being to produce a KV typical of those seen in photos from the early stages of operation Barbarossa, the German invasion of the USSR. KV's from this period were generally well finished , fairly new and had accumulated little wear and tear other than a light dusting from the dirt roads typical of the time and place. I also chose to have the model buttoned up with no crew figures in open hatches. Tamiya do not supply any figures with this kit but they do sell a separate set of Russian figures that include tank crew which can be used with this kit if desired.



Construction proceeded smoothly as you would expect with a Tamiya product and everything was assembled prior to painting with the exception of the supplied clear headlight glass. I built the whole model and installed the tracks before painting. I mounted the model on a wooden dowel which served as a handle during the painting process. The basic model was painted with a variety AK Russian green shades over which a fine mist of highly thinned Tamiya gloss was sprayed to give a subtle sheen in places. The tracks and tow cables were hand painted before weathering began. I applied various AK washes and pigments over the basic paint finish to get the desired dusty effect.





Once the model was painted and weathered I mounted it on its base. I built the small base from Insulation foam sheet and set out to depict a small section of narrow dirt road. The insulation foam is easily carved and is ideal for forming basic ground contours. You can laminate pieces together using PVA to get more extreme variation in height if desired. I generally prefer irregular shaped bases that are sufficient to include all the



elements I want without any awkward spaces to try and fill. Finely ground soil was sprinkled on to the ground diluted PVA glue to give the ground a little natural texture and then I airbrushed various dusty browns. After this I added various scenic products to simulate grass and small bushes.

I took the kit to the Nats in Wellington where it placed 2nd in class. On my return I decided to take some photos to post on the web and after looking at the larger than life images it became apparent that my weathering left a bit to be desired. It was clear I need to tone back a lot of what I had done because the scale is smaller than I'm used to. I set to work mainly with artists oils to rework the whole finish. I started with green washes and later adding dusty effects using a slow layered approach with a variety of oil mixes. I applied a very sparing dose of dusty pigments in a few key places to finish and by and large I think the revised finish is a step up on my original attempt.



I enjoyed my first foray into quarter scale. Tamiya's usual balance between simplicity of build and a reasonable level of detail make the build a pleasure. To my eye the finished model captures the look of the real thing extremely well. I must say the comparative lack of choice of figures and accessories compared to 35th scale is something I would find a frustration if this was the only scale I wanted to build.



No 485 (NZ) Sqn Presentation Spitfires

DK Decals, 1/72-Scale Reviewed by Mark J. Davies



Summary	
Catalogue Numbers:	72034 - No 485 (NZ) Sqn Presentation Spitfires
Scale:	1/72
Contents & Media	Decals for twenty-two subjects with colour-printed painting & markings guide.
Price:	Available on-line from: Red Roo Models, not listed at the time of writing but anticipate a price of Aus\$17.00 , and Hannants for £8.33 .
Review Type:	First Look.
Advantages:	Excellent production quality, great value.
Disadvantages:	None noted.
Conclusions:	These are superbly well produced decals. They provide some interesting and attractive markings in 'The One True Scale' for Spitfire fans and Kiwi modellers alike. They also represent excellent value. Highly recommended.

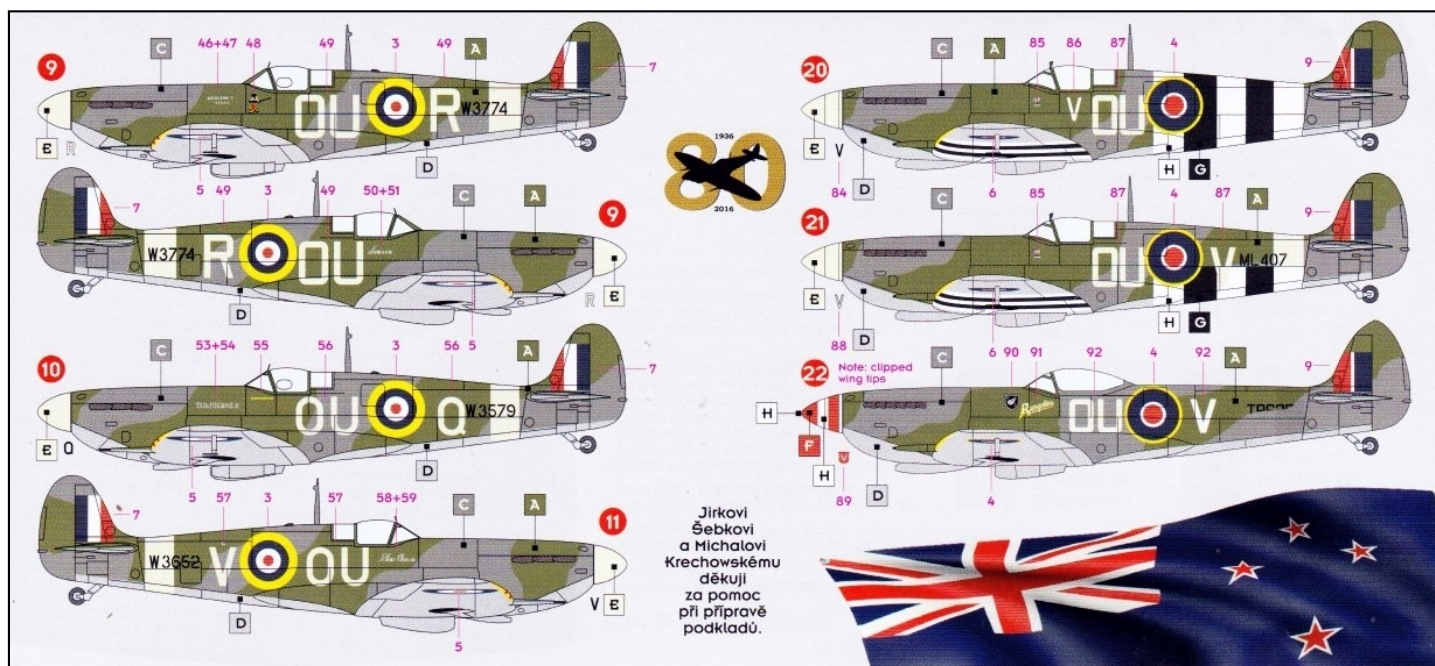
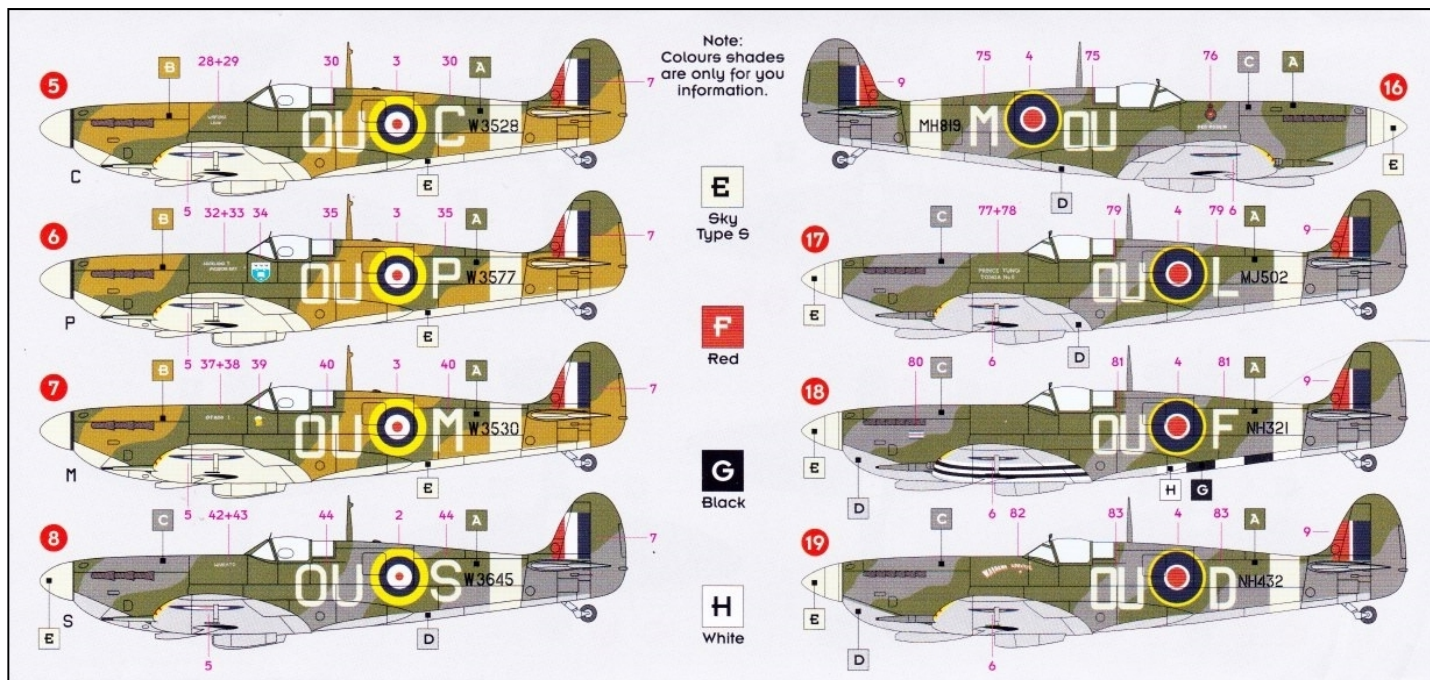
First Look

As a Kiwi modeller I know this sheet will be welcomed by many of my fellows, but hopefully for DK Decal's sake it will find favour with Spitfire fans globally. From the title I presume that these aircraft were funded by subscription, and several feature the names of NZ provinces.

The decals are supplied in the ubiquitous A-5 zip-lock plastic bag, although the packaging method is more unusual in that the single A-4 page of instructions are folded in three to enclose three decals sheets and their protective talcs.

The instructions are very nicely produced in colour on glossy paper, and clearly indicate markings placement. A brief note regarding the aircraft and its station location is listed in a separate box and keyed to each subject. Colour call outs are listed using RAF and further cross-referenced to the Humbrol and Agama paint ranges.

Each scheme is illustrated using a single side-profile view, except for scheme N^o9 which has two illustrated as personal markings appear on both sides. These profile views are about as small as one would want them to get, but are fit for purpose; they can be improved by scanning an enlargement as I have done here.



Plan views are much smaller, but include panel lines to aid correct placement of national insignia, and so again are adequate.

<p>1 Spitfire Mk.IA, X4620 485. Sqn (RNZAF) 1941</p> <p>2 Spitfire Mk.IIA, R7820 485. Sqn (RNZAF) 1941</p> <p>3 Spitfire Mk.VB, AB870 S/L M.W.B. Knight 485. Sqn (RNZAF) 1941</p> <p>4 Spitfire Mk.VB, AB918 Sgt L.J. Frecklington 485. Sqn (RNZAF) 1941</p> <p>5 Spitfire Mk.VB, W3528 485. Sqn (RNZAF) 1941</p> <p>6 Spitfire Mk.VB, W3577 485. Sqn (RNZAF) P/O D.T. Clouston, 1941</p> <p>7 Spitfire Mk.VB, W3530 485. Sqn (RNZAF) 1941</p> <p>8 Spitfire Mk.VB, W3645 P/O E.P. Wells 485. Sqn (RNZAF) 1941</p> <p>9 Spitfire Mk.VB, W3774 Sgt W.V. Crawford-Compton 485. Sqn (RNZAF) 1941</p> <p>10 Spitfire Mk.VB, W3579 F/L S.C. Norris 485. Sqn (RNZAF) 1941</p> <p>11 Spitfire Mk.VB, W3652 P/O J.R. Falls 485. Sqn (RNZAF) 1941</p>	<p>12 Spitfire Mk.VB, BM199 Sgt D.G.E. Brown 485. Sqn (RNZAF) 1942</p> <p>13 Spitfire Mk.VB, BM233 F/O D.J.V. Henry 485. Sqn (RNZAF) 1942</p> <p>14 Spitfire Mk.IXC, MH473 F/L K.C. Lee 485. Sqn (RNZAF) 1943</p> <p>15 Spitfire Mk.IXC, PT881 485. Sqn (RNZAF) 1944</p> <p>16 Spitfire Mk.IXC, MH819 485. Sqn (RNZAF) 1943</p> <p>17 Spitfire Mk.IXC, MJ502 485. Sqn (RNZAF) 1944</p> <p>18 Spitfire Mk.IXC, NH321 S/L J.B. Niven 485. Sqn (RNZAF) 1944</p> <p>19 Spitfire Mk.IX, NH432 P/O M.A. Collett 485. Sqn (RNZAF) 1944</p> <p>20 Spitfire Mk.IXE, ML407 F/O J.A. Houlton 485. Sqn (RNZAF) June 1944</p> <p>21 Spitfire Mk.IXE, ML407 F/O J.A. Houlton 485. Sqn (RNZAF) September 1944</p> <p>22 Spitfire Mk.XVI, TB625 W/O M.J.C. Lind 485. Sqn (RNZAF) 1945</p>	<p>How to apply decals</p> <ol style="list-style-type: none"> 1. Cut out the needed detail from the sheet. 2. Submerge the decal completely in lukewarm water for 15 sec. 3. Put the wet decal on non-blotting base and allow it soften completely. 4. Place the decal together with the base paper on the model. Keep the decal by tweezers and remove the base paper carefully. In case that the decal was placed incorrectly, add eater with a brush on the border of the decal. The position of the decal can be corrected then. 5. If the decal is located on the right place, press it with a soft cloth to eliminate all water and air bubbles. 6. Allow the decal dry well. 	<p>Recommended colours</p> <table border="0"> <tr> <td>A Dark Green Humbrol 116 Agama B1</td> <td>E Sky Type 9 Humbrol 90 Agama B5</td> </tr> <tr> <td>B Dark Earth Humbrol 29 Agama B2</td> <td>F Red Humbrol 153 Agama A49</td> </tr> <tr> <td>C Ocean Grey Humbrol 106 Agama B3</td> <td>G Black Humbrol 33 Agama 07</td> </tr> <tr> <td>D Medium Sea Grey Humbrol 64 Agama B6</td> <td>H White Humbrol 34 Agama 01</td> </tr> </table>	A Dark Green Humbrol 116 Agama B1	E Sky Type 9 Humbrol 90 Agama B5	B Dark Earth Humbrol 29 Agama B2	F Red Humbrol 153 Agama A49	C Ocean Grey Humbrol 106 Agama B3	G Black Humbrol 33 Agama 07	D Medium Sea Grey Humbrol 64 Agama B6	H White Humbrol 34 Agama 01
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D Medium Sea Grey Humbrol 64 Agama B6	H White Humbrol 34 Agama 01										
<p>All camouflages are reconstruction of possible appearance.</p>		<p>printed by BOA Agency</p> <p>Information and contact: e-mail: dkdecals@seznam.cz www.dkdecals.cz</p> <p>Dealers:</p>	<p>Recommended 1/72 Kits: Spitfire Mk.I KP, Hasegawa, Tamiya, Airfix Spitfire Mk.II KP, AZmodel, Revell, Airfix Spitfire Mk.VB KP, AZmodel, Tamiya, Revell, Eduard, Hasegawa, Sword, AZmodel, Airfix, KP Spitfire Mk.IX KP, AZmodel, Airfix, KP Spitfire Mk.XVI Sword, AZmodel</p>								

Although the set advises twenty-two options scheme N^o20 & 21 are for the same aircraft, one with full fuselage invasion stripes covering the serial number, the other with partial stripes exposing it. Another scheme, N^o22, has three-and-half serial numbers, as there is the option of a partially over-painted serial number.

A note mentions that all camouflage patterns are a reconstruction of possible appearance. I take this to mean that the patterns apparent in reference photos has been extrapolated to correspond standard patterns, as only rarely will photos showing all sides of a particular subject be available.

The decals are printed by BOA Agency appear to be of superb quality, with excellent registration, good colour density, and a gloss finish. I also suspect that they may be a little thicker than some Czech decals as it is possible to feel them raised from their backing paper. I am confident they are not too thick by any means, just that I suspect these will be less fragile and prone to folding over on themselves than some other Czech decal brands.

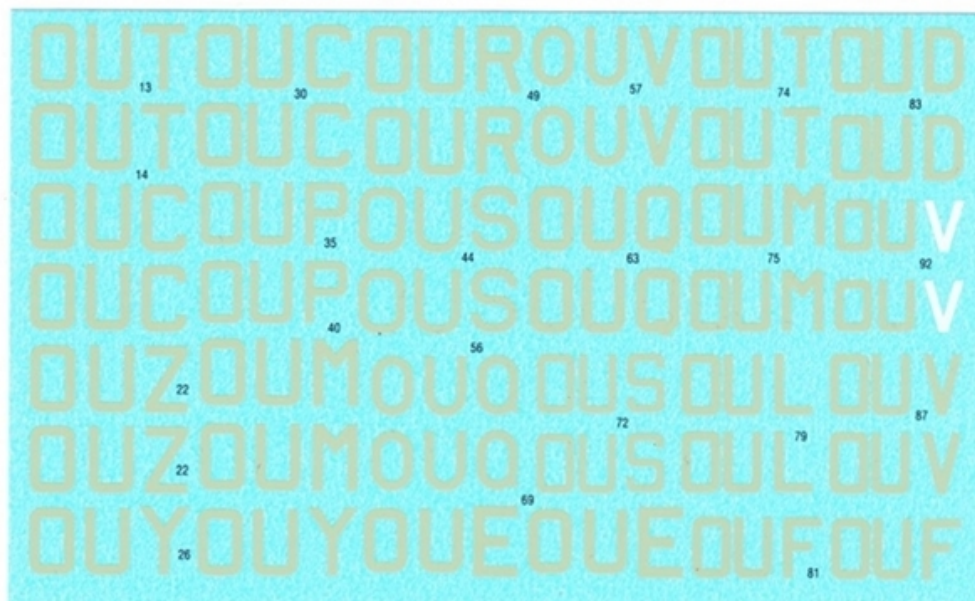
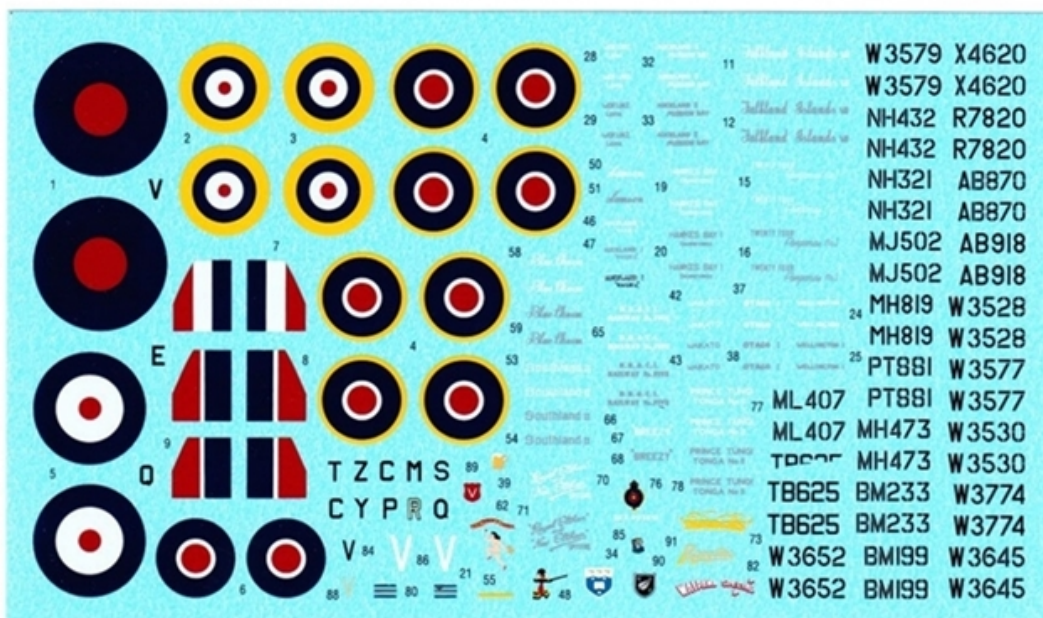
The decals come supplied on two sheets. They include serial numbers covering twenty-one options, with sufficient codes for eighteen subjects (some codes are repeated on different aircraft), and sufficient national insignia for two aircraft (obviously kit decals will provide for these in the majority of cases). This is an ideal set an interesting group build with your mates.

Conclusion

These are superbly well produced decals. They provide some interesting and attractive markings in 'The One True Scale' for Spitfire fans and Kiwi modellers alike. They also represent excellent value.

Highly recommended.

Thanks to Red Roo Models for this sample.



Airframe & Miniature No.2

The Hawker Typhoon

Including the Hawker Tornado

Valiant Wings Publishing

Summary:	
Catalogue Number	Airframe & Miniature No.2, Second Edition: The Hawker Typhoon (Including the Hawker Tornado) <i>A Complete Guide To The RAF's Classic Ground-Attack Fighter</i> ISBN: 978-0-9930908-8-2 Author: Richard A. Franks
Contents & Media	Soft Cover, A4 portrait format, 176 pages, numerous monochrome and colour photo images, detail and isometric drawings, colour profiles, technical description, variant details, and scale plans; also an extensive modelling section with reviews, build articles, kit, accessory and decal lists etc.
Price	Available on-line from Valiant Wings Publishing and Hannants for £18.95, and stockists worldwide.
Review Type	First Read.
Advantages	The best all encompassing Typhoon reference a modeller could have. Incredibly thorough, well laid out and illustrated, it provides a wealth of information.
Disadvantages	None noted.
Conclusion	<p>This is a superb reference for anyone interested in the innermost details of Hawker's Tornado and Typhoon. Obviously, the book is more devoted to the Typhoon as the far more significant aircraft of the two.</p> <p>The level of detail and information provided is almost mid-blowing in its thoroughness; it is all clearly and logically laid out, easy to read, and superbly illustrated.</p> <p>The detailed and informative in-box reviews of the majority of Typhoon kits ever released are very handy guides, as are the numerous build articles on the leading kits in all the popular scales from 1/72 to 1/24. The appended list of kits, accessories and decals released to date are the most complete I can recall seeing.</p> <p>Aimed very much at modellers, this book should not be overlooked by the pure plane enthusiast with an interest in the nuts and bolts aspects of these two interesting and closely related aircraft.</p> <p>This is the best example of an all-embracing single-type aircraft reference for modellers I can recall reading. Quite simply, it is absolutely a must-have for anyone seriously interested in the Typhoon and/or building a scale model of one. I cannot recommend this Airframe Album highly enough.</p>

AIRFRAME &
MINIATURE
No.2

for the enthusiast and modeller

Second Edition



**Revised
& Updated**

Includes Airfix new
1/72nd & 1/24th kits

The Hawker Typhoon

Including the Hawker Tornado

A Complete Guide To The RAF's Classic Ground-Attack Fighter

by Richard A. Franks



Valiant Wings' Airframe Albums are unashamedly pitched at modellers with their visual emphasis on airframe details, focus on variant differences, colour schemes, and modellers' information section. Nonetheless, they should also appeal to aircraft enthusiasts as well, provided that they are not seeking any sort detailed operational accounts or service history.

The first edition of Airframe & Miniature has been out of print since 2014, and included:

- 128 pages packed with vital information that no active aviation modeller should be without
- 40+ pages of technical information
- 20+ pages of walkaround images and technical diagrams
- 5+ pages of camouflage and markings
- 25+ pages of model builds and modelling information
- 200+ photographs including wartime images
- Colour side views and four-views by Richard Caruana
- 3D isometric views of all variants by Jacek Jackiewicz
- 1/72, 1/48 and 1/32 scale full kit builds

A full set of fold-out 1/48 scale plans

The second edition reviewed here adds an extra 48 pages of content including:

- Extra pages of walk-around images and technical diagrams.
- Extra 1/72nd full kit builds by Steve A. Evans of the Brengun and new-tool Airfix kits. These have been specially commissioned for the book.

A specially commissioned build of the 1/24th scale Airfix kit by Daniel Zamarbide.

It is distinguishable from the first edition by its specially commissioned new front cover artwork by Jerry Boucher.

The graphic design of the book is most pleasing, and it is laid out in three main sections; chapters and topics within each section are as follows:

Airframe:

Evolution – Tornado. Development details and history concerning the prototypes, their camouflage and markings, and is illustrated with photos and scale profiles.

Evolution – Typhoon. As for the Tornado above.

Typhoon Production Variants. An exhaustive and very detailed list of specific features pertinent to, and differentiating, thirteen production batches and variants. Also included are technical specifications, photos and scale profiles.

Drawing-Board Projects. Similar information and images to Chapter 3 above, covering seven projects; these being annular radiator equipped, night-fighter, carrier-borne fighter, and four Typhoon II (Tempest) prototypes.

Camouflage & Markings. An in depth account supported by photos and useful tabulated illustrations of national insignia, squadron codes and serial numbers applicable to various wartime periods.

Survivor. A detailed record of the sole complete surviving Typhoon (MN235) from production to its unveiling at Hendon's display hall to mark the 70th anniversary of D-Day on June 6th, 2014. This chapter also includes a list with brief details of other Typhoon sections and replicas.

Colour Profiles. Twenty colour profiles and three plan views by Richard J. Caruana illustrating various Typhoon colours schemes and markings.

Miniature Chapters:

Hawker Typhoon Kits. No less than 19 pages of thorough in-box reviews covering numerous Typhoon kits released over the past 57 years in 1/72, 1/48, 1/32 and 1/24 scales.

Building a Selection. Over 30 pages of build articles, some that include the use of after-market accessories, covering the following kits:

- 1/72 Scale. The Academy, new-tool Airfix, and Brengun Mk.Ib (late production), and CMR Prototype/Mk.Ia
- 1/48 Scale. The Hasegawa Mk.Ib
- 1/32 Scale The MDC Mk.Ib;
- 1/24 Scale. The Airfix Mk.Ib

Building a Collection.

Isometric drawings illustrating variant-specific features for five Tornado and 22 Typhoon versions (includes three Mk.II's that were Tempest prototypes).

In Detail: Covering just the Typhoon, this chapter is broken down into sections covering to major components; namely: cockpit & canopy, fuselage, cowling, engine, wings, undercarriage, tail, armament, ordnance, sighting, drop tanks, and miscellaneous. It uses a combination period and recent photos, plus many technical manual drawings to illustrate these features. This is a particularly useful and interesting chapter due to its thoroughness, explanatory notes, and high levels of detail provided. The modern photos are in colour and include many restoration shots of MN235 presented in walk-around style. A cutaway drawing from the official service manual is also included.

Appendices.

These provide comprehensive lists concerning their subject area and include numerous images:

- I Tornado & Typhoon Kit List.
- II Tornado & Typhoon Accessory Lists.
- III Typhoon Decal List.
- IV Tornado & Typhoon Production.
- V Bibliography.

Scale Plans.

Attached inside the rear cover are eight fold-out pages of well-drawn 1/48 scale plans that include cross-sections. These cover the bubble-top and car-door Typhoon Mk.Ib.

Conclusion

The overall quality of production is very good, logically laid out, and easy to read.

This is a superb reference for anyone interested in the innermost details of Hawker's Tornado and Typhoon. Obviously, the book is more devoted to the Typhoon as the far more significant aircraft of the two.

The level of detail and information provided is almost mid-blowing in its thoroughness; it is all clearly and logically laid out, easy to read, and superbly illustrated.

The detailed and informative in-box reviews of the majority of Typhoon kits ever released are very handy guides, as are the numerous build articles on the leading kits in all the popular scales from 1/72 to 1/24. The appended list of kits, accessories and decals released to date are the most complete I can recall seeing.

Aimed very much at modellers, this book should not be overlooked by the pure plane enthusiast with an interest in the nuts and bolts aspects of these two interesting and closely related aircraft.

This is the best example of an all-embracing single-type aircraft reference for modellers I can recall reading. Quite simply, it is absolutely a must-have for anyone seriously interested in the Typhoon and/or building a scale model of one. I cannot recommend this Airframe Album highly enough.

Thanks to [Valiant Wings Publishing](#) for the review sample.

Figure 10 - Early low-production Spitfires, Spring 1942

A Spitfire of the early low-production type, as seen in the photograph above, is a Type C aircraft. It is a 1000-hp version of the Spitfire, with a 1000-hp engine and a 1000-hp engine. It is a 1000-hp version of the Spitfire, with a 1000-hp engine and a 1000-hp engine.



Figure 11 - Mid-production Spitfires, Spring 1942

Figure 12 - High-production Spitfires, Spring 1942



Figure 10 - Early low-production Spitfires, Spring 1942

- 1. A 1000-hp engine with a 1000-hp engine.
- 2. A 1000-hp engine with a 1000-hp engine.
- 3. A 1000-hp engine with a 1000-hp engine.
- 4. A 1000-hp engine with a 1000-hp engine.
- 5. A 1000-hp engine with a 1000-hp engine.
- 6. A 1000-hp engine with a 1000-hp engine.
- 7. A 1000-hp engine with a 1000-hp engine.
- 8. A 1000-hp engine with a 1000-hp engine.
- 9. A 1000-hp engine with a 1000-hp engine.
- 10. A 1000-hp engine with a 1000-hp engine.

Figure 11 - Mid-production Spitfires, Spring 1942

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- 10. A 1000-hp engine with a 1000-hp engine.

Figure 13 - High-production Spitfires, Spring 1942



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- 1. A 1000-hp engine with a 1000-hp engine.
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The Spitfire of the high-production type, as seen in the photograph above, is a Type C aircraft. It is a 1000-hp version of the Spitfire, with a 1000-hp engine and a 1000-hp engine.



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Wing Markings



The 'ABC' marking on the upper wing of the Spitfire, as seen in the photograph above, is a 24-inch high marking. It is a 24-inch high marking, with a 24-inch high marking.



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Wing Markings

ABCD
24" high
No leading edge
Constant style

P HM 1234567890
P HM 1234567890
8" high
No leading edge
Constant style

National Markings
1942-44
(Revised) (Constant)

National Markings Up To May 1942



National Markings Post May 1942

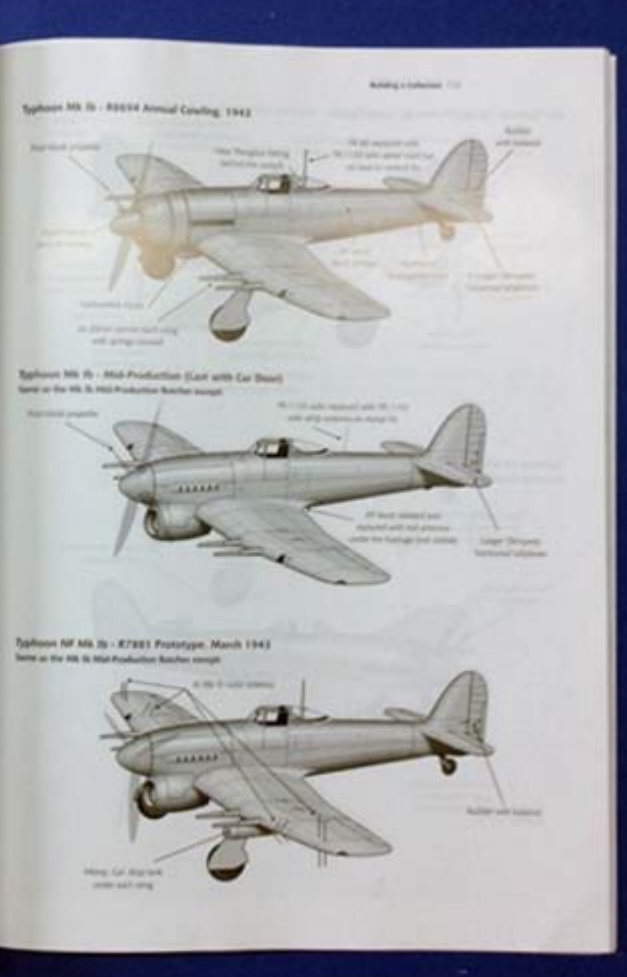
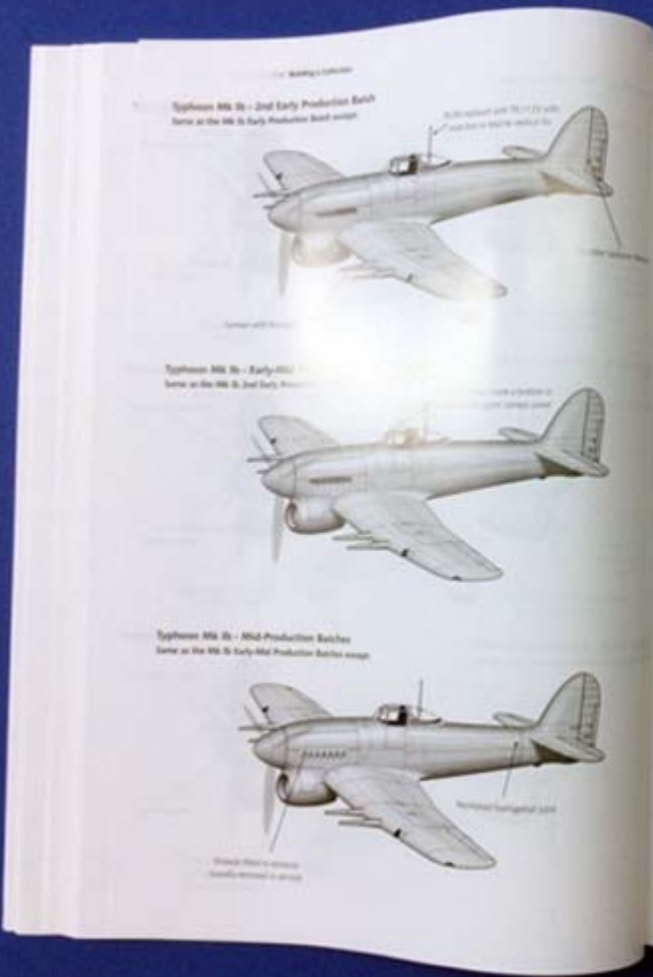


National Markings Post January 1945



They were to be removed from the upper wing and lower fuselage in the period of the 2nd August to 21st October 1942. The... (text continues)

At the same time an order was issued to modify the upper wing. This was to be done by adding a white band 1/2 the diameter of the blue work and circle 3/8 the... (text continues)



Exhausts

The Spitfire exhaust is a series of different exhausts that change as the Spitfire goes from the prototype to the production aircraft.



This is a view of the exhaust of the Spitfire II, which is a single exhaust with a single exhaust pipe.



This is a view of the exhaust of the Spitfire III, which is a single exhaust with a single exhaust pipe.

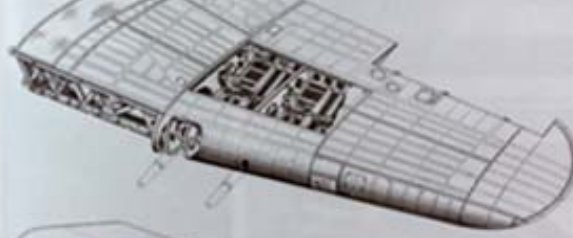
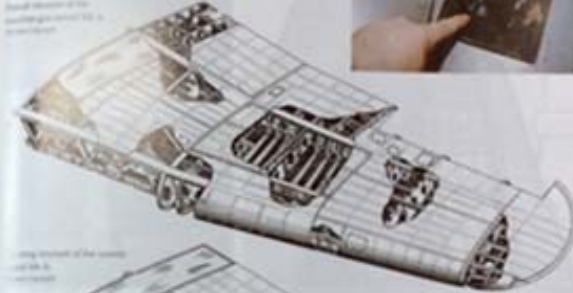
When the first set of exhausts were introduced in 1940, they could result in a significant area being blocked, as seen in this view from a ground angle. The main intake air is normally pushed under the car after bleed-off, the main intake air is to be seen.



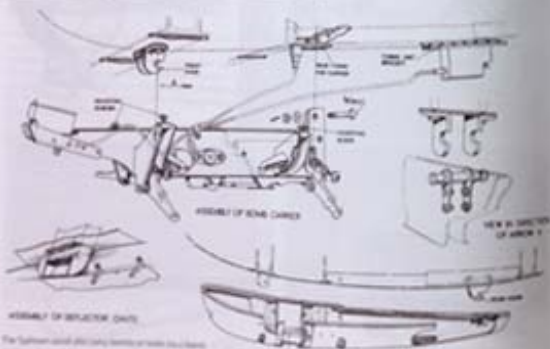
Then are the exhausts on the Spitfire III, which is a single exhaust with a single exhaust pipe.

Wings

This is the Spitfire with the open leading edge of the main wing. This is a wing section in the field with the wing surface where the main wing is.



Ordnance



The Spitfire could carry bombs of various sizes, and the carrier could be used in a variety of ways.



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Sighting

Here you can see a 1/6" 17" sight mounted on the fuselage of a 1/6" scale model of the F4U Corsair. The sight is mounted on the fuselage of the model.



Here you can see a 1/6" 17" sight mounted on the fuselage of a 1/6" scale model of the F4U Corsair. The sight is mounted on the fuselage of the model.



Here is a close-up of the 1/6" 17" sight mounted on the fuselage of a 1/6" scale model of the F4U Corsair.

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The mounting for the 1/6" 17" sight is made of brass and is mounted on the fuselage of the model. The sight is mounted on the fuselage of the model.

Here you can see the 1/6" 17" sight mounted on the fuselage of a 1/6" scale model of the F4U Corsair.

Drop Tanks



The drop tank is mounted on the fuselage of the model aircraft. The tank is made of brass and is mounted on the fuselage of the model.

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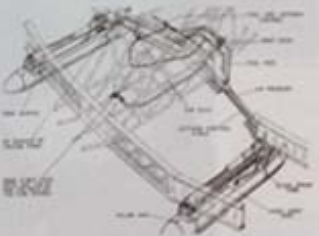
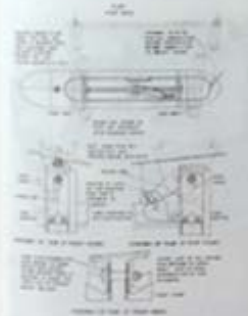


Diagram showing the dimensions of the drop tank.

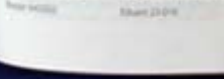
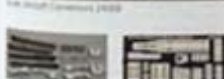
Diagram showing the dimensions of the drop tank.



- 1/6" 17" Sight #1000
- 1/6" 17" Sight #1001
- 1/6" 17" Sight #1002
- 1/6" 17" Sight #1003
- 1/6" 17" Sight #1004
- 1/6" 17" Sight #1005
- 1/6" 17" Sight #1006
- 1/6" 17" Sight #1007
- 1/6" 17" Sight #1008
- 1/6" 17" Sight #1009
- 1/6" 17" Sight #1010
- 1/6" 17" Sight #1011
- 1/6" 17" Sight #1012
- 1/6" 17" Sight #1013
- 1/6" 17" Sight #1014
- 1/6" 17" Sight #1015
- 1/6" 17" Sight #1016
- 1/6" 17" Sight #1017
- 1/6" 17" Sight #1018
- 1/6" 17" Sight #1019
- 1/6" 17" Sight #1020



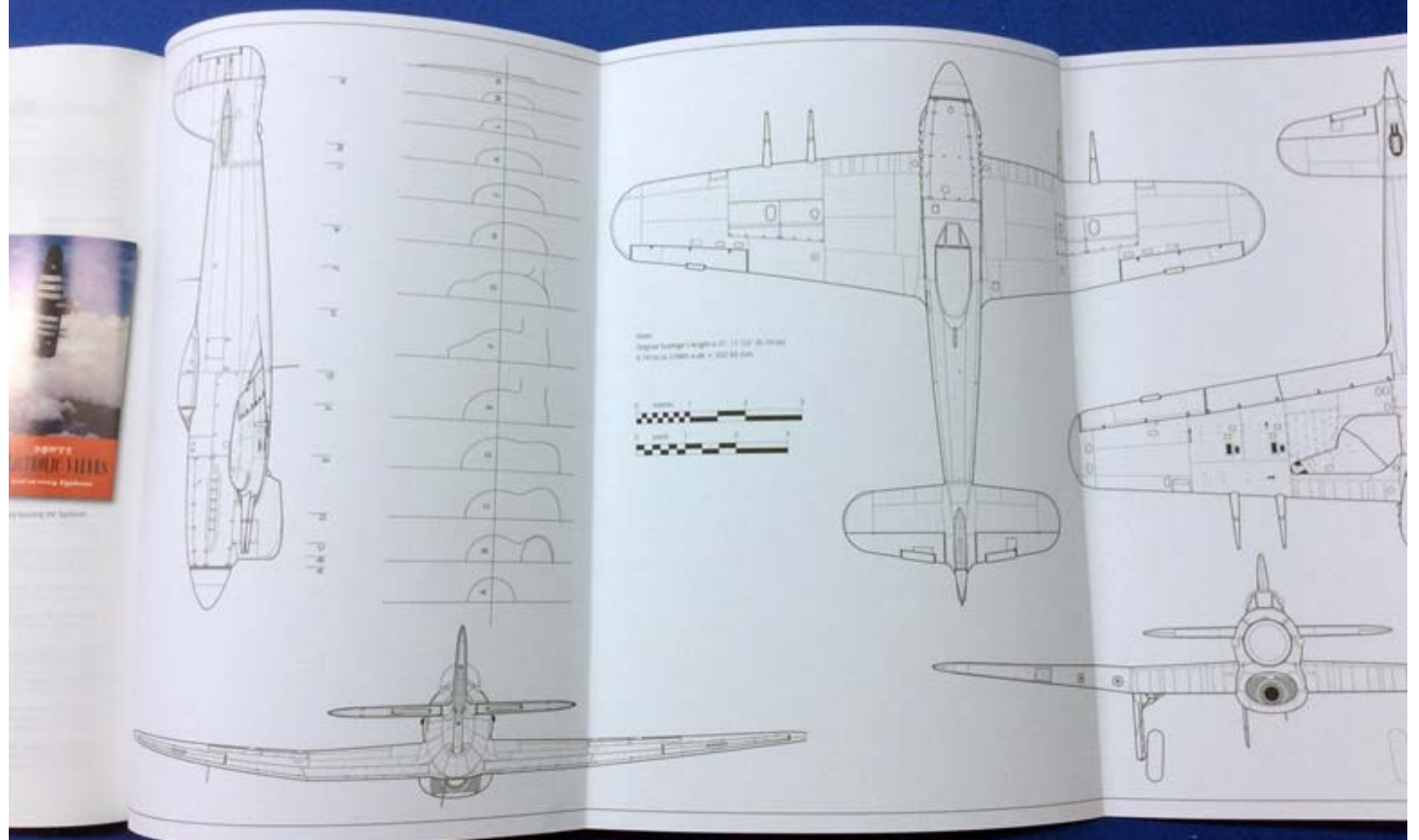
- 1/6" 17" Sight #1021
- 1/6" 17" Sight #1022
- 1/6" 17" Sight #1023
- 1/6" 17" Sight #1024
- 1/6" 17" Sight #1025
- 1/6" 17" Sight #1026
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- 1/6" 17" Sight #1079
- 1/6" 17" Sight #1080





Tool Time

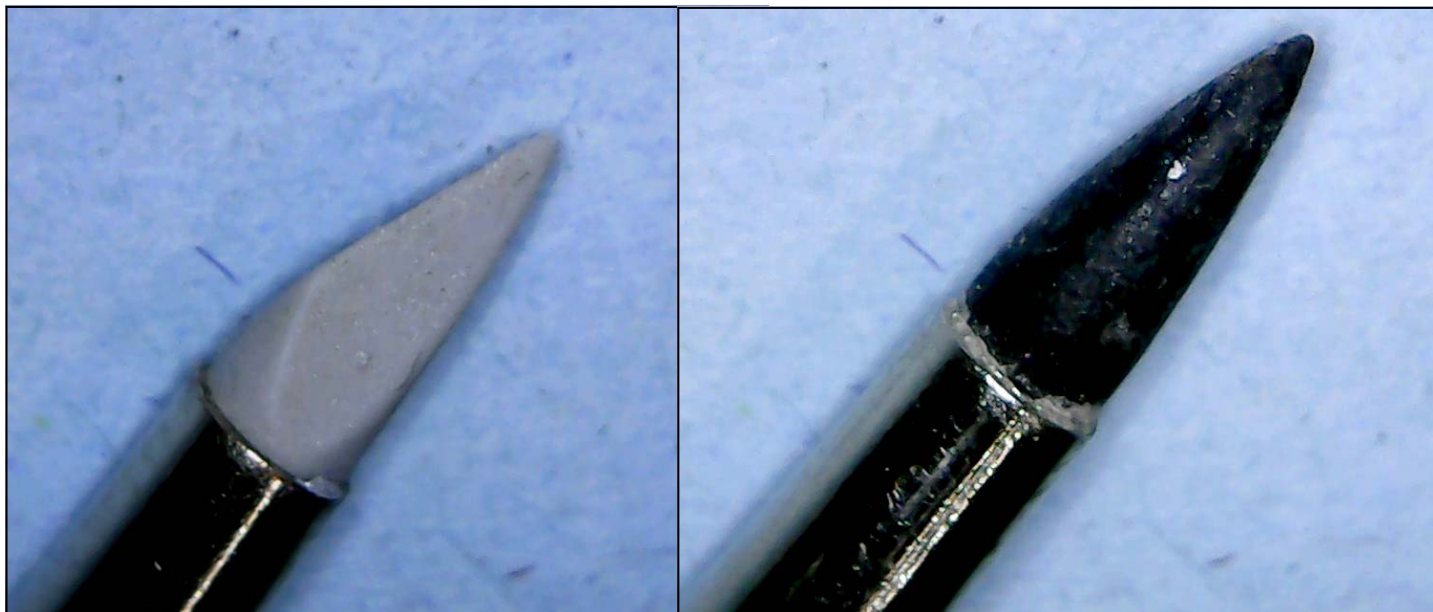
By Lance Whitford

Colour Shapers

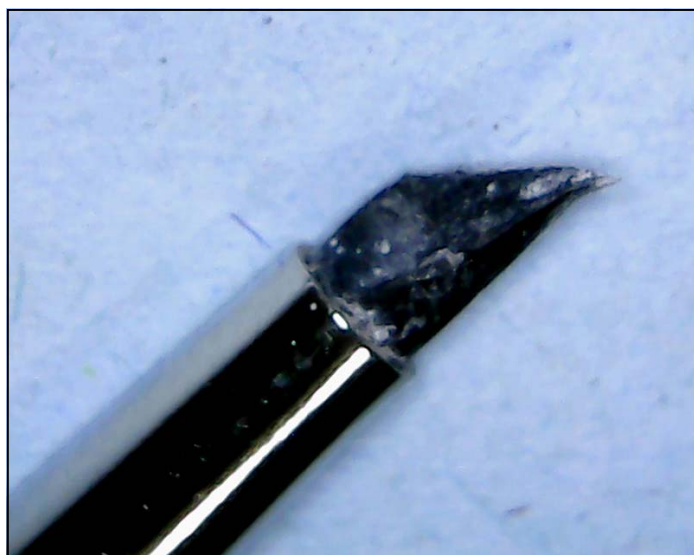
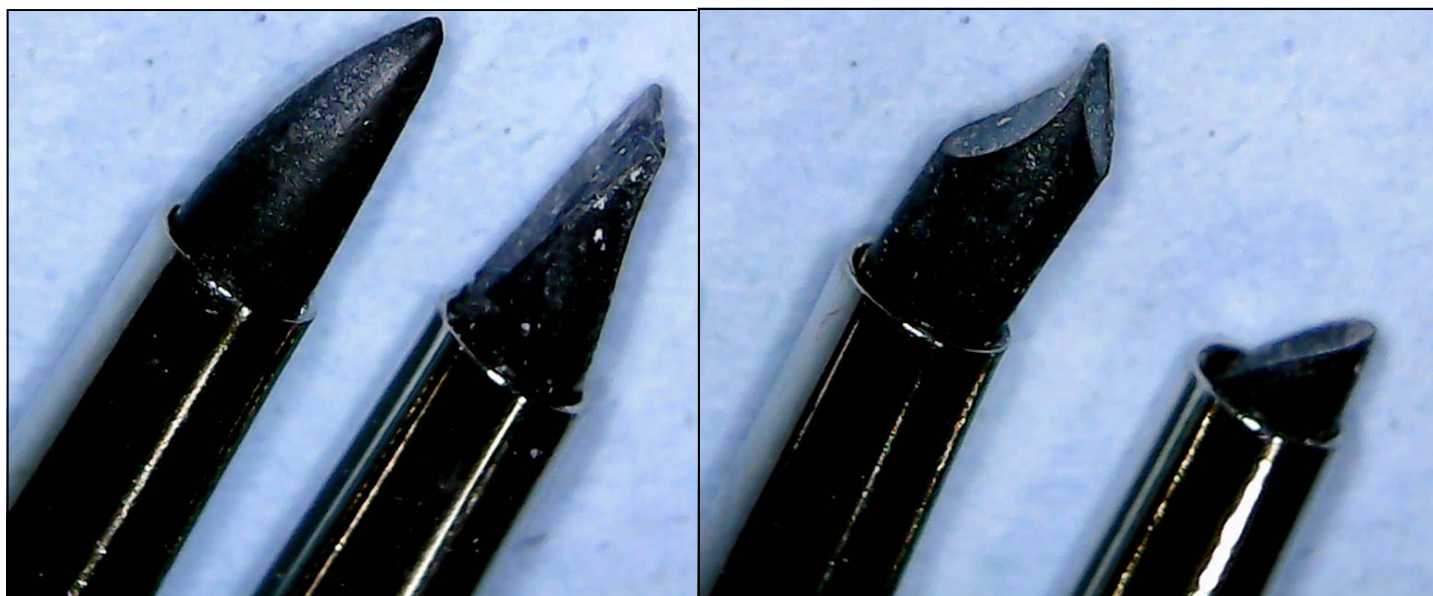
This month I'd like to talk about some useful tools I initially came across at my local art supplies store. These look like paintbrush at first glance but instead of bristles these are tipped with a variety of silicone shapes. They also come in a range of sizes with mine being at the smaller end of the scale. Colour shapers are designed to produce a variety of effects in conjunction with a variety of colour mediums. They can be used to remove colour as well as apply colour. Because the tips are made of silicone they will not absorb any type of material which adds to the possibilities. But what's this got to do with modelling you may wonder. These tools are very useful for sculpting with mediums like epoxy putty and I also have used the to apply and clean-up Tamiya putty in very tight spaces. The photo below shows my current selection. The 2 on the right were sourced locally while the 5 on the side came as a set from a Chinese art supplier and cost less than one of the others.



Here are a few close-ups of the tips on my selection. The top 2 are the name brand tools which start from around \$12 each at places like Gordon Harris.



The shots below are of the cheapo Chinese set I bought showing some of the stock shapes.



The shot on the left shows the tip of the tool I was working Tamiya putty with. Although silicone is non porous there are minute pits and indentations which can pick up a little material. They are however very easy to clean and nothing really sticks to them for long.

GALLERY

CLUB NIGHT MODELS

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

http://ipmsauckland.hobbyvista.com/galleries_2016.html



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.

