Macchi C.202
by Richard J. Caruana

Curtiss P-40B/C
by Paul Lawson

Hawker Typhoon
by David Batt

Plus
Ryan PT-16/20
Eagle's Wings - No.2
Ship Me East of Suez
A-26 Invader

Volume 5 Issue 4 April 1999 £2.50
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Volume 5 Issue 4

Editorial
Things certainly seem to be getting into the swing as far as all the new releases for 1999 go. As you will see in this edition we have a massive listing of kits due in the coming months, and there are a few surprises! It never ceases to amaze me the number of rumours that are making their way around our hobby. If you look on the Internet for example, you will find that every aircraft model is due in every scale from one manufacturer or another! It is certain that a number of these are true but a lot of those that actually happen are just coincidences. For instance, one of the most recent rumours was of a Fairy Swordfish by Tamiya in 1/48th scale, and an SM.79 from the same company. Well, the first seems to have been confirmed at Nuremberg, but I am afraid that the latter seems to be a bit of a joke from a group in Italy who saw some Japanese tourists photographing and measuring the preserved example in the Italian Air Force Museum. Another example of 2-4-2-7! fear!

Things as far as this title goes are moving along nicely and I think that the move to 80 pages a month has pleased a lot of our readers. A few issues ago I wrote about how certain people felt modelling magazines were no more than a ‘catalogue’ - How did I let the floodgates open there, and not as I had expected. The response got me all in favour of what we did, and the only complaint I received was quickly rectified once we went to 80 pages. My reasoning behind the initial comments were to show that making a magazine like this every month is a fine balance, and you will never please everyone. I recall living in deepest Wiltsshire as a teenager and having no idea of what was available to me as a modeller. Once I started work and had money I subscribed to a modelling magazine and - wow! Sufficient to say I have always felt that a modelling title like this should offer a lot of news and reviews as well as an excellent mix of modelling features. Last month's edition was an historic one for me, as I achieved a goal that I had had for a long time. This was that the edition had main features in all three 'main' scales, namely 1/72nd, 1/48th and 1/32nd. It is my intention to carry this formula on in future editions and at this point I would like to thank all my contributors for their excellent work, and to welcome new names like Joel M. Hamm and Prof Steve J. Corvil from the USA, and Kenneth Clapham over here in the UK. What I still require though are more model makers who work in 1/72nd scale. The subjects are no real problem, as this scale has always had a lot of kits available. If you feel that you fit this category, and would like to contribute to Scale Aviation Modeller International, then please drop me a line at the editorial address, or Email me at SamVD@compuserve.com.

A Further point before I go is that a four-page Index for Volume 4 of SAMI is now available from us for just £1.00.

Well, let's get on with the news, reviews and features and stop using up space on this valuable contents page (or the Production Team will start meaning against)

Richard A. Franks
Editor

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Scale Aviation Modeller International
This month’s News Update is somewhat shortened, as a lot of the information usually in this section is covered in ‘New Kit Listing 1999’ on pages 298 to 301.

1/48th

This is a new name to us, but apparently this Japanese firm have been producing some stunning resin and metal conversion and update sets for the entire Mitsubishi A6M Zero series.

Their latest product however is the specially marked Curtis P-40N which marks the completion of the 15,000th airframe. The kit is in fact the excellent Maure example, but it comes with the mass of national insignia applied to the type. The price for this kit is currently listed at ¥3,100.

For more details contact:
CREATE 301, P.O. Box 52, Yaizu-City, Shizuoka 425-869, Japan.
Fax: 011 82 54 669 9495

1/48th

An update set containing resin and etched brass detail parts has been released by Verlinden for the Academy F-111E. The set includes a complete new cockpit interior, plus some additional underwing stores.

1/44th

The latest resin kit from this manufacturer is the BMW ‘Flagellrad I’ WWII Luftwaffe flying disc!

This month’s News Update is somewhat shortened, as a lot of the information usually in this section is covered in ‘New Kit Listing 1999’ on pages 298 to 301.

1/72nd

The latest resin kit from this company is the Horten XVIII ‘Fernbomber’. This massive delta still equates to a 57cm wingspan even in 1/72nd scale, and that’s probably why the UK price is £40.00.

Harold Bickford Models

F7U-1 Cutlass

1/48th

A new name to us, this American source is listing a resin kit of the Vought F7U-1 Cutlass and it retails for $25.00.

For more details write to:
RR 1 Box 79, Auburn, NE 68305-9733, USA

Kendall Model Company Inc

KMC inform me that due to their commitment to the production of the new mixed media kit of the Boeing 727-200 in 1/72nd scale, they will be taking the opportunity to step their resin accessory production for a few months. This will allow KMC to undertake some redesign work before starting resin accessory production back up, hopefully in the late summer. As a number of their products will also become obsolete at this time, I would advise you all to get what you want now.

1/144th

DELETED FOR 1999

DELETED

What follows is a list of all the kits which have been deleted from each manufacturer’s list for 1999.

Airfix

1/72nd

‘All in One’ set

40072 Panavia Tornado
50013 Grumman F-14A Tomcat
“The Historic Collections”
8514 WWII Fighter Classics
20023 Grumman F4-U Corsair
20097 AW Seawolf
40007 Savoia Marchetti SM79
50005 Boeing B-17G
50011 Douglas A-20/20G Invader
50015 McDonnell F-15A/B Eagle
50023 Mi Mi-24 Hind A
60010 Consolidated B-24J Liberator

1/48th

‘Premier Collection’

97105 Supermarine Spitfire F.E22/24
71040 Supermarine Spitfire F.E2/24
71041 Supermarine Spitfire F.E22/24

Hasegawa

1/400th

ML1 Boeing 747-400 ‘Japan Airlines’
ML2 Boeing 747-400 ‘All Nippon Airways’
ML3 Boeing 747-400 ‘Virgin Atlantic’
ML5 DC-10/10 Japan Airlines
ML6 DC-10/10 JAS
ML7 Boeing 747-400 ‘Lufthansa’
ML8 Boeing 747-400 Air France
ML9 Boeing 747-400 ‘KLM’
ML10 Airbus A300-600R JAS
ML11 Airbus A340 ‘Virgin Atlantic’
ML12 Boeing 747-300 ‘Nippon Airways’
ML13 Airbus A340 ‘Lufthansa’
ML14 Airbus A320 ‘All Nippon Airways’
ML15 Airbus A321-200 ‘All Nippon Airways’

1/200th

MX1 DC-3 ‘All Nippon Airways’
MX2 Kawasaki C-1 ‘Charlie One’
MX3 Kawasaki C-1 ‘Ske Version’
MX4 C-47 Skytrain
MX6 Showa LED Type 20 Transport
LT19 Boeing 747-400 Air France
LT1-1011 ‘Hyster’ ‘All Nippon Airways’
LT2 DC-10/10 Japan Airlines’

1/72nd

AP4 Focke Wulf Fw 190F-8
AP5 Focke Wulf Fw 190A-8 ‘Nachtjager’
AP7 Focke Wulf Fw 190A-5
AP9 Messerschmitt Bf 109E-3
AP9 Messerschmitt Bf 109E-4
AP11 P-51B Mustang
AP12 P-51C Mustang ‘Yellow Tail’
AP21 P-51K Mustang
AP25 RM-1 Wildcat
AP26 F4U-4 Wildcat ‘Yellow Wing’
AP30 P-51K Mustang
AP31 P-51D Mustang
AP32 SB-3 Dauntless
AP33 SB-4 Dauntless ‘Ace of Spades’
AP35 TBF/TBM-1C Avenger
AP38 Hawker Hurricane MK IC ‘Last of the Many’
AP42 Spitfire Mk IX
AP45 F4U-2/2B ‘Buffalo US Navy’
AP50 Messerschmitt Me 262A-1a/U1
BP1 J-35F Draken

Supermodel

AERMACCHI MB-339 K

AERMACCHI MB-339 A-PAN

BPS 2-351 Draken (Swedish)
BP7 F-86D ‘JASDF’
BP7 F-86E ‘USAF’
NP2 Kawasaki E7K1 ‘All Japan’
NP3 Mitsubishi G4M Betty
NP3 Mitsubishi Ki-43 ‘Oscar’
NP6 Mitsubishi Ki-51 ‘Sonia’
NP8 Nakajima Ki-27 ‘Nate’
NP9 Mitsubishi Ki-43 ‘Oscar’
QP2 Fuji T-1A
QP3 F-30 ‘Shooting Star’
QP4 Mitsubishi ‘J2M’
QP5 Fuji T-3
ET2 F/A-18 Hornet
ET3 AH-64 Apache Longbow
KT1 F-15E ‘Seymour Johnson’
KT2 F-14A Tomcat Plus
KE1 F-16 ‘Raven’
KE14 EA-6B Prowler ‘Low Vis’
K22A MM-25 Fulcrum
K23 F-15C Eagle
K23 F-15D Eagle
K7 F-16 ‘Wild Weasel’
K77 RF-4C/E Phantom

1/144th

JT2 Lockheed P-38–3/4 ”Geraldino II”
JT3 P-38LG/G “Beautiful Lass”
JT5 Spitfire Mk VB ‘Topp’
JT6 Spitfire Mk Vb ‘1.R.Gleed’
JT7 Spitfire Mk VI
JT8 Messerschmitt Bf 109E-3
JT10 Messerschmitt Bf 109E-4/7 Fliegerhorst’
JT12 Messerschmitt Bf 109E-4/7 Fliegerhorst’
JT14 Messerschmitt Bf 109E-4/7 Fliegerhorst’
JT16 Messerschmitt Bf 109E-4/7 Fliegerhorst’
JT20 Messerschmitt Bf 109E-2
JT31 N.A. P-51D Mustang
JT32 Macchi C.202 Falco
JT37 Nakajima Ki-44 ‘Kou Shoki’
JT39 Macchi C.202 ‘Cavallo Rampante’
JT41 P-47D-30/30 Thunderbolt
JT5 F-4G ‘Wild Weasel’
PT01 F-4B/N

Scale Aviation Modeller International
Hobbycraft

Just to keep you updated the release dates given by this firm for their 1999 releases are:

1/144th
• B-47E - February 1999
• B-47E - February 1999
• B-47H - March 1999

1/72nd
• F-89H Scorpion - May 1999

1/48th
• Goodyear F2G 'USN' - August 1999
• Goodyear F2G 'Racer' - August 1999
• A-4B Skyhawk - November 1999
• A-4C Skyhawk - November 1999
• A-4E/F Skyhawk - December 1999
• A-4 Israeli Skyhawk - December 1999
• Mig-17F - April 1999
• DHC Otter - March 1999
• Arvo CE.105 Arrow - April 1999

1/32nd
• Neptune 17C - June 1999

Czech Master

1/72nd
A new resin kit of the Gluster Meteor E8 in early, late and F9 configurations has been released by this company. The kit features both RAF and Israeli decals and examples can be obtained in the UK via Hannants.

HR Models

1/72nd
The new resin and etched brass kit of the Pfalz E.II from HR is available in the UK for £13.50.

Toko

1/72nd
The next three kits due from this source, apart from the Sopwith 1 1/2 Strutters mentioned elsewhere (see Advance Preview), will be the Aviatik (Berg) DL, which will be due at the end of April and retails for £5.25 in the UK, the Hansa Brandenburg D.I and the Newport 16c, both due at the end of May and which will retail in the UK for £5.25 and £4.49 respectively. For more information contact the UK importers Pocketbond Ltd.

Monogram

1/48th
The limited edition reissue of the Rockwell B-1-B Lancer from Monogram is listed at a staggering £59.95 in the UK, although the current secondhand prices for this kit are far higher!

Combat Models

1/72nd
A massive vac-form kit of the Dornier Do-X is now available from this source for £44.95.

1/48th
A new vac-formed kit of the Curtiss C-46 Commando has been released by Combat and retails for £43.95.

1/32nd
The F-105D/F kit in this scale can be obtained for £39.95 and an additional parts pack can also be obtained, although we have no price for it yet.

Revell

1/144th
04019 F35 Lightning 'RSAF'
04012 KC-10 Extender & Tornado ECR

1/72nd
04100 Blackburn Skua
04101 Avro Shackleton NR.3
04102 Bristol Blenheim Mk I(f)
04104 BAC Canberra B (f)
04110 Hawker Hurricane Mk I
04124 Republic P-47 Thunderbolt
04131 BAC Lightning F6
04306 A.A. F.48 Fury
04307 McDD F-4E Phantom
04309 Focke Wolf 200 AA Transporter
04313 Heinkel He 129/B-2/R-2
04342 Douglas A-20/B Boston
04351 Sepecat Jaguar GR.1A
04383 F-14A (Plus) Tomcat
04383 Panavia Tornado IDS 'RSAF'
04493 Westland Wessex HAS.3

1/48th
04500 Lippisch P 13a
04520 Consolidated PB4Y-5 Catalina
04528 Heinkel He 111H-11Y-6

1/32nd
04704 DH 82A/Tiger Moth
04426 Eurofighter EC-135
04443 Eurofighter 9K-117 'Health Net'
04757 Messerschmitt Me 262A-1a/U4

The latest addition to the extensive range of power tools by this manufacturer is also the smallest power tool they produce. The MB160 rotary tool uses a 12 volt stepped motor and weighs just 125 grams. The tool comes in a standard form as the MB1000 Hobby Kit (£44.99) and as a variable-speed version in MB5001 (£69.99). For more information on Revell products contact them at: Revell, Macford Products Ltd., 1 & 2 Enterprise City, Meadowfield Avenue, Spennymoor, Co. Durham. DH6 6JF.
Airfix
1/72nd
Although these kits were all listed as available last year, we are informed that the Tiger Moth, Westland Gazelle, Northrop F-5 Freedom Fighter and Fiat G.50 have been released by Airfix in January. The reasoning behind this is that these kits have moved from Series 1 to Series 9.

Available in February was the Fiat G.91 in 'Frecce Tricolori' markings. This kit is just a reissue of a really old tooling, although the variant shown is correct for the Frecce Tricolori team and is, we believe, unique in this scale.

More on the
Skyblazers
1956
Roger Pearce's keen eye noticed that I placed the wrong drawing for FU-192 (SAMI Vol.5/1, January 1999, page 78). The main view should now look as on the left, and the difference concerns the arrangement of the stars under the starboard wing. I had it right the first time, when I submitted the proofs, then for some strange reason it got confused with the underside plan of the aircraft from the photos. Apologies to all.

Meanwhile, Mr Duncan Cartis sent in some additional information.
The team leader, Jim Reynolds, often flew also as the fifth (space) aircraft, 53-1162, which I did not illustrate as I did not have enough information. Star arrangements for '62 is similar to that of '21 and '29. By June 1956, the canopy name on '21 had changed from 'James' to 'Jim'.

Foster and a flag panel had been added to all aircraft below the cockpit on the port side. Various countries visited the team.

This panel was situated to the rear of the boarding step line, and above the U.S. AIR FORCE stencil, and had five flags on the top line and four centred below. The top line seems to be France, Germany, UK, Belgium, Switzerland, while the bottom line was Holland, Greece, etc. (can anyone fill in the blank?). Finally, Mr Curtis states that the fuel tank pylons were of the 'extended' type, not of the 'standard' depth.

Richard J. Caruana

Fujimi
30101 Messerschmitt Bf 109 G
30102 Mitsubishi A6M2 Zero
30103 N.A. P-51D Mustang
30104 Focke-Wulf Fw 190A-8/9
30105 Supermarine Spitfire Mk V
30106 Focke-Wulf Fw 190D-9
30107 LTV F-104 Starfighter
30182 Douglas A-1H Skyraider
30190 Messerschmitt Bf 110 C/D
30191 Grumman F6F Hellcat
30192 Northrop F-5A Freedom Fighter
30193 Douglas A-4 Skyhawk
30194 Dassault Mirage IIIIC
30195 Dassault Mirage IIIR
30196 Douglas TA-4F Skyhawk
30197 Bell AH-1J TOW Cobra
30198 Bell AH-1J Sea Cobra
30199 Bell OH-1H Iroquois
30200 Westland Wasp
30201 Sud Alouette II
30217 SA-341/F Gazelle
30218 MBB Bo-105 PAV-1/1
31218 Bell OH-58 Kiowa
31225 Westland Lynx HAS Mk 2/3/4 Mk 1
31226 Bell AH-1F TOW Cobra
31227 Bell UH-1N 'Orient Express'
31228 Messerschmitt Bf 109 C/D
31229 Bell AH-1F TOW Cobra
31220 Bell UH-1H 'Black Bunny'
31223 Bell AH-1J Sea Cobra
31224 Hughes 500MD/600
31225 NKC-135A 500MD/600
31220 AH-1G Seasprite
31221 AH-1W
deleted

AMT/Ertl
1/72nd
325 Thunderbirds Flight Display
8236 Lockheed AC-130U Gunship
8669 Boeing KC-135R
8668 Boeing KC-135A Airborne Laser Lab
8619 Northrop YB-49 Flying Wing
1/48th
5794 Curtis P-40K Warhawk
8844 Grumman F7F-2/3N Tigercat

Italeri
1/72nd
146 C-119 Flying Boxcar
044 Vought Chance F-4J5N Corsair
113 Capsron C-44
125 Junkers Ju 86
016 Junks Ju 88A-4
075 Kamov Ka-20 Helix
034 SR-71B Stratojet & YF-17 Thunder Dart
011 Sikorsky SH-60J Seahawk
026 Relante C
158 P-21 Lion
056 Pe-2

1/48th
834 Panavia Tornado IDS
**Pfalz E1**

**Technical Data**
- Manufacturer: JMGT
- Scale: 1:72
- Status: New Tooling
- Fabric Effect: Raised text
- Type: Resin, White Metal, Etched Brass & Vac-formed Plastic
- Parts: Resin 11, Metal 7, Vac-form 1, Etched 15 Decal Options: 1
- Manufacturer: JMGT, 71 Grande Rue, 92570 Valmondois, France
- Source: Hannants

**Instructions**
A 30/50 mix of French and English, best described as basic, but adequate. The drawings and construction diagrams are clear enough to anyone with experience of building WWI aeroplanes but some additional reference, such as the Windows book mentioned in the instructions, will be helpful.

**Construction**
Assembly is very straightforward. The breakdown of parts is such that there are no join lines to sand down or gaps to fill. The rear fuselage is cast in a solid piece producing an accurate box section with sharp corners. All the resin parts are superb and need very little cleaning up. Two vacform cowling sections are provided, in case of any slips with the knife.

I only had one problem with the construction and that was with the wing to fuselage join. After a dry run to check the fit, the locating pegs broke off so I had to drill holes for small sections of plastic rod to reinforce the join. The tailskid supports are in etched brass and quite fragile but they can be strengthened with a coat of superglue.

I was surprised to find that the etched brass feet didn’t include the jacket for the Spandau machine gun as I would consider it pretty well essential in this scale. A white metal gun, no matter how well cast, just doesn’t look as good.

The kit goes together very quickly and easily. I think I spent more time cutting out and sending down the vacform cowling than I did on the rest of the assembly. Even the undercarriage went on first time and lined up just right, with a slight forward rake. I glued on the elevators in a slightly drooped attitude to give the model some character.

**Accuracy**
Windsock Datafile 59/Pfalz E1. E1/V has the wingspan at 9.26m and the length at 6.30m. Using my trusty calculator to divide these by 48 resulted in figures of 193mm for the span and 131mm for the length. The kit was absolutely bang on! The Pfalz E1 was an exact copy of the Morane Type II and the etched fret contains the Morane logo you wish to build the French version.

**Colour Options**
Only one. The standard finish was clear doped fabric areas with black nose panels, cowlings, undercarriage, pylons and wheels. Most Pfalz monoplane were covered in black fabric and appear a very light colour in photographs. The kit instructions suggest painting the model white but I went for an off-white ivory shade, weathered with yellow and brown pastels. Colour notes for the cockpit interior and other detail parts are provided.

**Decals**
Just a selection of black crosses and lots of black stripes. This was the most tedious part of the model. Putting on the black strips takes ages. My usual method is to slap on plenty of Johnson’s Klear and I had no problems with the kit decals, they didn’t wrinkle up at all (I had a few strips left over where the backing paper was starting to dissolve, so don’t over soak them).

**Conclusions and Recommendations**
Excellent. Spot on in scale and appearance and one of the easiest models I’ve built. Highly recommended.

Thanks to I.G.M. for the review sample.

---

**Eurocopter HAP ‘Gerfaut’**

**Technical Data**
- Manufacturer: Aeroplast
- Scale: 1/72
- Price: £3
- Parts: Plastic 73, Clear 1
- Decal Options: 4
- UK Source: PJ Models
- Tel: 0181 992 5106 Fax: 0181 932 2238

**The Kit**
This is a new kit of the French Army version of the Eurocopter Tiger, the HAP ‘Gerfaut’ battlefield helicopter. It is moulded in light grey plastic with no flash, but prominent mould lines need to be removed. There are some fine panel lines along the main fuselage, but there are also rows of oversize rivets on the tail boom and around the cockpit. The sprues include the HOTT and Mistral missiles and the 20mm chin-mounted machine gun found on the French version, as well as the mast-mounted sight and Trigat missile system, suggesting there may be a follow-up kit of the German PAH 2 version planned.

**Instructions**
The instructions consist of a single A3 sheet folded into a four-page booklet. The front page shows the layout of the decal sheet and the positioning of all the decals common to all versions. The interior pages give a useful sprue plan, the colour scheme options and the positioning of the decals specific to them. The painting guide gives the relevant numbers for Humbrol enamels, but there are no equivalent ‘FS’ or ‘BS’ colour references given. The back page covers construction.

**Construction**
This is a fairly simple kit to build. The cockpit includes seats, basic instrument panels and cyclic controls, but nothing else. The fit of the fuselage halves is generally all right but they don’t match all the way round. Fortunately, the worst of this can be confined to the underside where it won’t be so noticeable. However, the main problem areas during construction are the cockpit canopy and the exhaust outlet diffusers. Firstly, the one-piece canopy will not fit without a great deal of careful filing to adjust its shape to match the opening. Where this shows up most is the point at which the front of the canopy meets the end of the nose fairing, where the canopy should fit flush, but doesn’t. The three-part exhaust cover assembly also has problems, firstly matching up the parts themselves and then the whole lot to the fuselage. The base of this section should fit over the tail rotor-shaft cover and meet with the fuselage sides, but it doesn’t, leaving a large gap either side when viewed from above. The engine intakes are just open holes with no moulded intake grills or internal central bulkhead, so you can look straight through and out the other side of the engine bay!

The rotorhead detail is a little basic and the whole assembly wobbles about if not cemented in place. The rest of the construction is simple and problem-free.

**Accuracy**
The look of the finished model is generally good, but it seems to lack some of the subtle curves of the real aircraft. The dimensions are good, with the 42R 7 inch rotor diameter reduced down to 7.05 inches, the 45ft 11in. fuselage length reduced to 7.6 inches and the height of 12ft 6in, scaled down to 2.1 inches. Dimensions were taken from Air International magazine, July 1996.

**Colour Options**
The colour options are all for French machines including two overall black prototypes registered F-ZWU and F-ZWWW. There is also a three-colour ‘A.L.A.T.’ camouflage scheme and one in ‘desert sand’ and tan.

**Decals**
The decal sheet provides all the stencilling, titles, insignia registrations, etc. for all the options offered. The decal film is quite thin with a semi-gloss finish and the depth of colour and quality of the printing is good. They conform well to the surface contours of the model without the use of any decal solutions, except where they have to cross the over-sized rivets, where the carrier film shows up.

**Conclusion and Recommendation**
Basic construction is fairly straightforward and it does produce a quite solid little model, but there are too many areas requiring attention to make it into a good model. There are other better versions available in this scale and I cannot, therefore, recommend it.

Thanks to PJ Models for the review sample.

---

*Ed Smith*
Nakajima Kikka

Over a series of six stages. Construction starts with the cockpit interior, this consists of a mixture of plastic and etched brass parts. For a model of this size the interior is well furnished. All of the interior is fitted into place and the two fuselage halves are then joined, but before this is done one small job needs to be attended to: the support for the nose wheel oleo! This to be honest is the only aspect of this kit that I feel lets it down. MMP suggest putting a piece of plastic rod between the two fuselage halfs to attach this oleo to. I would have preferred MMP to have supplied some form of moulded box insert. I didn’t use the rod idea but fashioned a nosewheel bay from plastic card instead; I would strongly recommend this action.

The rest of the kit can then be assembled according to the instruction sheet. Very little can actually be said about the construction as it is so straightforward, all that is needed is a little care.

Accuracy
According to the information contained in the new ModelArt special on the Shusai and other Japanese jets the model scales out and looks very accurate.

Colour Options
The colour options given in the kit are for the first prototype and a fictitious aircraft from the 724th Kokutai. Both aircraft are painted in dark green upper surfaces with light grey lower surfaces.

Decals
The small number of national markings and stencils included are all well printed and adhere without any problems.

Decal Rating: 9/10

Conclusion and Recommendation
If you have never tried a so-called limited run kit before then try this one out. Apart from the silly idea for the nosewheel oleo this model is very simple to build. The only area that many cause some people (like me) problems is folding that etched-brass stuff, in which case you can do what I do on nearly all occasions and replace it with plastic card. Overall this is a great model to build, is quite significant and would look good in your collection. One thing that did catch my eye was how small it is compared to the Me 262.

A very highly recommended kit, well done MMP.

My thanks to MMP for the review sample.

Peter Fearn

Sopwith ‘Navy’ Pup

printed in Czech and English, and well illustrated. Construction is broken down into five stages, as well as a very useful (when I get round to it) rigging diagram.

Construction
Once the plastic parts are cleaned up, construction is relatively straightforward, although there are some problems. Stage 1 is the attachment of the piston ring to the nicely cast white metal 8hp Le Rhone. I could not get a satisfactory fit with this part and eventually gave up, adding the piston rods out of wire. Stage 2 is the construction of the cockpit, which proceeded smoothly, although Flashback could have given slightly better indication of where the etched frames for the side should go. The fuselage halfs go together very well and needed only a few strokes with the wet-and-dry to completely remove the join. One area where the fit is not as good here as on other Eduard kits is the join between the lower wing moulding and the fuselage, which necessitated a fair amount of subtle carving of the fuselage at the wing root to get the wing moulding to sit flush. There is also a small gap between the front of the wing moulding and the underside of the nose panel on the fuselage, which needs filling and sanding. Once this problem was solved, the further construction stages presented no problems. Fitting the top wings requires patience, but is otherwise easier than on many bigplane kits; you should drill out the location holes a little, to provide a positive fit for the struts. The wheels need to be drilled to accept the steel pins which are used as axles. Whilst I was building the kit, I detached the aileron, the elevators and the rudder to allow them to be re-attached at a slightly more natural pose for an aircraft sitting on the ground. You have the option of adding the resin landing skis (N 6438), or a conventional wheeled undercarriage (Dunning’s aircraft).

Accuracy
The dimensions quoted in the aircraft profile for the Pup are length 191.375 inches, span 268.6 inches. The kit is as close to these as makes no odds, and certainly captures the rather dainty appearance of the Sopwith fighter.

Colour Options
Flashback give you two options, one for N6454, the machine used by Dunning on his historic first landing on HMS Furious; and N6458 ‘Excuse Me?’ also attached to HMS Furious in 19171718. Dunning’s aircraft, which I chose, is finished in standard Khaki Drab, with the fuselage sides, and all undersurfaces in clear doped linen. One can use many colours to represent Khaki Drab (RFC PC10), depending upon the age and condition of the aircraft concerned. For this model I used Humbrol Matt Dark Earth (29) from an aerosol can for the wings, tail surfaces and fuselage decking. The wooden coaming around the cockpit was represented with some spare plywood decal from the Eduard Hansa-Brandenburg ‘Star Strutter’ kit. The undersurfaces were airbrushed in Xtracolor clear doped linen (X21), and the remainder of the aircraft finished by brush. The white metal cowling can be polished up to give a high sheen.

Decals
You get one set of national insignia, plus the serials for the two different aircraft. The decals are nice and matt, and very thin. They went on well with decal solvents, and are very accurately printed - no misalignment of rounds! The model was rounded off with a thin coat of satin varnish.

Decal Rating: 9/10

Conclusion and Recommendation
This is a nice kit, and will give you a Pup rather different from the normal ‘Western Front RFC’ ones. It is not totally problem free, as shown by the problems I had with the engine and the fit of the lower wings, but anyone familiar with Eduard kits should have no problems here. I would certainly recommend this kit.

My thanks to Four Plus UK for the review sample.

Charles Doonley

(Flashback have recently been renamed and their products will now be marketed under the ‘Airfix’ label - Ed)
Saab Sk 35C Draken

**Construction**
Assembly is relatively straightforward except that superglue adhesive should be used. Some filling was necessary around the joints and panel lines had to be restored where sanding had removed them, but this is no different than would normally be required on an injection moulded kit. The two vacformed canopies are a bonus since the first attempts at trimming invariable go wrong! I didn’t fit the drop tanks as no indication of their location was given on the instructions, although I understand that they should go side by side under the centre fuselage.

**Accuracy**
According to my copy of The International Directory of Military Aircraft the wing span of a full size Draken is 9.40 metres, the model span was 131mm, this is less than 3.5mm too big which in my book is near as damn it spot on! The length was also accurate.

**Colour Options**
As I stated earlier, there are no references to markings or colour on the instruction sheet, so I chose to finish my sample in accordance with the small illustration. This shows an aircraft of Flygflottan 10 of the Swedish Air Force in which appears to be an overall silver finish. The model was sprayed with Holts undercoat grey, and any further filling and sanding completed before a final undercoat. Three coats of Humbrol ‘Jet Spray’ (a household acrylic paint) was applied overall and this gave a silver coat with a gloss finish. The cockpit interiors were painted medium grey and the seats in light grey with the cushions and webbing in various shades of olive. I painted the intakes red to add a little colour.

**Decals**
The decal sheet contains one set of six standard Swedish roundels and another set in low viz grey, one black and one low viz set of numerals and a selection of red numbers. A selection of warning markings and logos for a Saab Gripen are also included and I suspect it was for this aircraft that this sheet was originally designed since most of the markings are too small for the Draken. The decals are extremely thin and when attempting to transfer them to the model most of them disintegrated beyond repair and I was left with no alternative but to revert to my own source in order to complete the model. Humbrol Decalx was used to settle the decals and they adhered very well to the silver paintwork.

**Decal Rating**
2/10

**Conclusion & Recommendation**
A very attractive model of a very attractive aircraft. The detail and recessed panel lines are first class and assembly was fairly straightforward with no major problems. Some of the smaller complicated parts such as the undercarriage units had suffered a little damage and would have been better produced in white metal and packaging could also have been improved to protect the contents. The inclusion of a spare canopy was a bonus, but thicker material could have been used to produce them, as they were extremely flimsy. I would have liked to have seen full painting details, the only reference was a tiny illustration on the instruction sheet. The decals were all but useless, which is a pity since not only do they mar what is otherwise an excellent kit, but the extra numerials and markings would have been a useful addition to the decal bank.

This is not a kit for beginners, but for anyone with a little experience of injection moulded kits and wishing to tackle their first resin model I would highly recommend this kit provided you had an independent source of suitable decals.

My thanks to Top Gun for the review sample.

Tony Clayton

**Tony’s Tip**
Where two canopies are provided and you trim the first one a bit too much, fit the good canopy over the bad one and use it as a guide to trim correctly.

Messerschmitt Me 262B-1a/U1

**The Kit**
When I first heard of this kit, I got excited. When I saw it, I was ecstatic! This all-new kit of the Messerschmitt Me 262b-1a/U1 two seater equipped with Fw42B Neptun V intercept radar and Flg 350 Nass 2C passive homing is wonderful. The engraved panel lines and detailed interior are so well done, I was not pleased to find upon examination two small and deep ejector pin marks right in the sidewall of each tyre, plus a few more noticeable ones elsewhere. The light grey plastic parts were flash free otherwise. The one-piece cockpit canopy was nice and clear, if on the thick side. Also it was loose, in with the other parts, and thus prone to scratches. There are two unpainted parts included on the kit sprues.

**Instructions**
The usual step-by-step fold out instruction sheet we all expect from Revell is provided. All detailed work such as the opening up of flashed-over holes, options and the ‘during construction’ paint work are well illustrated. The final paint work and decal placement, with all the myriad of small stencils markings involved, is clearly shown for three different aircraft. One of these is an aircraft that has undergone an emergency turbine change and this is indeed very interesting and unusual to find in a kit-supplied guide, especially in a kit of this price! All colours are given as RLM numbers as well as from the Revell range of paints.

**Construction**
Firstly I made up the two cockpit tubs which are wonderfully detailed, and once painted RLM 66, beg to be black-washed and dry brushed. There are no decals for the instrument panels, but care and a steady hand gave me excellent results with a bit of paint. I did add two sets of seat belts from the Reheat range as the ones moulded in to the seats are very indistinct. The two completed tubs were then glued together. Before adding the finished unit to the fuselage half, I had to open up a number of flashed-over holes; for antenna, tail skid, the two Schloss 503A-1 Wilkingschiff racks for the under-nose drop tanks and for the radar arrays. (One could forgo the latter pair of holes to convert the model to the two-seater trainer, but I am deviating from the kit a bit here!) I painted the fuselage interior RLM 66 and then added the aforementioned cockpit unit. Next I joined the two fuselage halves together. I added about 12 grams of lead to the nose; aware that the nose wheel bay and its associated nose insert would take up lots of room. Take care at this point, for the nose insert and wheel well bay will not fit if you get it wrong! I then made up the wings, and painted all the wheel wells RLM 83. Care is required in fitting the wings to the fuselage, as the fit is quite tight but clean. No filler was needed at all. All the undercarriage doors need cutting into pieces, the cut lines being well marked on the instructions as well as on the parts. This done, I made up the undercarriage after painting the undercarriage legs and

**Scale Aviation Modeller International**
Accuracy
In my reference books, length is given as 34ft 9in and wing span as 40ft 11in. The model scales out at a length of 34ft and wing span of 41ft. This is superb! Also in comparing the model with photographs in my book "German Aircraft Markings 1939-1945", it looks right in every respect. My other references were "Warplanes of the Luftwaffe" and "Aircraft of the Axis Forces WW2".

Colour Options
There are three colour options for aircraft of 10/NJG 11 Kommando Welter from April to May 1945. All have undersurfaces painted RLM 22 and a fuselage of RLM 76 with a mottle of RLM 74. One has the same on all the upper surfaces as well, the other two have upper surfaces in splinter pattern RLM 81/RLM 82 plus a red tip to the nose. I chose this scheme to finish my model in. As usual, I used the Luftwaffe Warbirds Acrylics colours from AeroMaster with the odd touch of silver from Tamiya Acrylics.

Decals
The usual markings are included and lots of stencil marks, but no swastikas so these came from the spares box. I used the stencilled-on type as this is correct for Me 262/1a/U1 aircraft. All the supplied decals were well printed with excellent density and registration. They went on quite well but I did find a lot of gunge came off them in the water - a flaw with all Revell decals. I spent a whole evening placing the decals on the model only to find that the red ones all vanished when placed on the RLM 22 black paintwork! I was not too pleased I must say and obviously skipped the black on black stencil! A light silvering was noted.

Numerous dry runs are definitely a good idea here. The last main part is the canopy which just needs some careful cutting with a sharp scalpel before fitment. I did find that the radio in the rear cockpit sat a bit too high to allow the canopy to fit properly, some adjustments were needed to rectify this problem. I would therefore suggest cutting the canopy early on in the construction so that you can check the fit of the cockpit equipment and adjust it accordingly.

Accuracy
The specifications for the SBC-4 according to the Squadron Signal Helldiver in Action are span 34ft 6in and length 28ft 2in. The model scales out to a span of 34ft 3in and a length of 27ft 6in which is close enough for me and the model certainly captures the look of the original.

Colour Options
The kit comes with two options, the first being from VMO-151 serving in Samoa in 1942, and this is in a USN Grey (upper surfaces) and USN Light Grey (lower surfaces) scheme. The second option, which I decided to go with, is for the Aeronef. These aircraft were never actually received before the French Government capitulated, so they were left to rot in Martinique. I used Humbrol 129 (Satin US Gulf Grey) and 116 (Matt US Dark Green) for the upper surface grey and green respectively and Aeromaster 9082 for the lower surface blue.

Decals
The decals are made by Microscale; they have a gloss finish and very little carrier film. I applied them over a layer of Johnson's Klear and they adhered to this very well with no adverse effects. Even the white was completely opaque to the paint underneath. Decal Rating = 9/10

Conclusion and Recommendation
This is one of those aircraft that I've always liked but never thought would be made in 1/48th scale so I was really pleased to receive it. After building the model I must say it's been thoroughly enjoyable with very good quality moulding and excellent detail. It's one of those kits where the extra time spent building it will really pay dividends in the end result. I wouldn't recommend it to the novice but anyone who's made a few mixed media kits should find this a joy to make.

My thanks to Classic Airframes for the review sample.

Dr P.R. Newell

Curtiss SBC-4 Helldiver

Technical Data

Manufacturer: Classic Airframes
Scale: 1:48th
Price: £29.95
Panel Lines: Recessed
Status: New Tooling

Type: Limited Run Injection Moulded Plastic, Resin, Etched Brass & Vac-formed Clear Parts: Plastic 58, Brass 33, Etched Brass 32, Acratex 2, Clear 2
Decal Options: 2

Manufacturer: Classic Airframes, Bringuiere Aviation Products, PO Box 577580, Chicago, IL 60637-7580, USA

UK Sources: Four Plus UK & Hannants

The Kit
My first thought on receiving this kit for review was what good box art it had, and upon opening the box things didn't go down hill; in fact, if anything they got better. The kit contains 35 grey injection moulded parts with a good level of detail, recessed panel lines and a small amount of flash. Some of the mould gates have blended in with the smaller parts and they will therefore need careful cleaning up. The model also contains 33 excellently moulded resin parts, two vac-formed canopies and an etched-brass fret containing 32 parts made by Eduard, all in separate bags which I think is a nice touch.

Instructions
Two sheets of instructions are given, one of which gives a short history of the aircraft and the two three-view colour options. The other larger sheet gives a full parts listing for all four mediums contained within the kit and thirteen construction diagrams which contain good clear detail plus a painting guide for the construction as it progresses.

The construction sheet also contains two diagrams to guide you through the rigging process, letting you know which are single or double wires and this is very useful especially if you're short of reference material.

Construction
The first six diagrams on the construction sheet are spent just on the internal detail. This is of an excellent standard containing side walls, seats with all seat belts, brass instrument panel, resin radio for the rear cockpit and an excellent level of detail for the two bulkeheads surrounding the wheel well. I would advise spending a lot of time on this part of the construction as most of the detail is visible when the model is complete.

The main fuselage was built next and, as ever, I sanded it down like a vac-form to get good mating surfaces. This meant that when they were brought together, no filler was needed.

The resin engine came next and is in eleven resin parts, moulded as well as any aftermarket product. It was an absolute joy to build and paint.

I now moved onto the lower wing which comes as a one-piece moulding. This did need some filler on the undersurface join, but the upper surface was filler free. The upper wing comes in two pieces; upper and lower, and they went together well. When I looked at them after construction however, I felt that the wing is too deep, so I would suggest sanding them down a bit before gluing them together. The recesses for the struts are very small and shallow so I opened these up a bit more to allow a stronger bond between the wings and struts. Next comes the main landing gear which is probably the most difficult area of the kit in that the instructions are a little vague in their positioning of the parts, which in turn don't fit as well as most other areas of the kit.

Even with the use of MicroSet and MicroSol solutions. There was no adverse reaction to these solutions, by the way.

Decal Rating = 7/10

Conclusion and Recommendations
What a fine kit this is from Revell, but with a few flaws. Those ejector pin marks, the light fit of the wings, the placement of that lead shot and sloppy location and fitting of the drop tanks. Otherwise, it is superb. I now have a very pleasing Me 262B-1a/U1 on my shelf that was a joy to build. How do Revell do it? So much modelling satisfaction for pin money! I really do urge you to dash out to your model shop and buy a stock of these. I have, especially with three paint options and a minor 'leave it off' conversion to be had for so little money! Most strongly recommended without reservation to all readers.

My thanks to Revell® B.Ney & Smith (Europe) Ltd. for the review sample.

Stefan Good
**Mitsubishi B5M1 'Mabel'**

**Technical Data**
- Manufacturer: AML
- Scale: 1/72nd
- Type: Limited Run Injection Moulded Plastic & Vac-form Clear
- Price: £8.50
- Decal Options: 3
- Source: Hannants (See Aeromaster advert for details)

**The Kit**
All the parts are on two sprues with each part being identified by an illustration on the instruction leaflet.

The plastic used for this kit is quite soft and you will find this quite useful in the construction stages. The quality of the mouldings is quite acceptable, but all the parts will require some degree of cleaning up. Surface details comprise fine engraved panel lines.

**Construction**
The assembly of this model follows a set of eleven stages, but unlike other kits they appear to be random. Stage 1 is the cockpit interior, this is then followed by the engine, wings and engines before you return to the cockpit. This does seem a little strange to start with but do not be put off. Stage 7 is the assembly of the wings. All of the wing interior surfaces will require a considerable amount of sanding to give better trailing edges. This task alone occupied me for several evenings but it is essential! Stage 8 is adding the interior and engine assembly to the fuselage halves. This will need several dry runs to achieve a good fit. Once the interior is added the rest of the assembly is quite straightforward provided you take care and do a lot of dry runs.

**Accurary**
According to Rene Francillons book, the B5M1 should have a span of 15.3m and a length of 10.234m. The model scales out well against these dimensions; I do however have one slight problem with this kit! No matter how much I look at the finished model, the profile of the cockpit area just does not look correct.

**Colour Options**
Only one option is provided in this kit, the aircraft being from the 33rd Kokutai. The colours are light grey on the lower surfaces and dark green upper surfaces.

**Yakovlev Yak-15**

**Technical Data**
- Manufacturer: Czech Model
- Scale: 1/48th
- Type: Limited Run Injection Moulded Plastic, Resin and Vac-formed Plastic
- Panels: Plastic 31, Resin 16, Clear (Vac-form) 2
- Decal Options: 3
- Manufacturers: Czech Model, c/o Squadron Products, 1115 Crowley Drive, Canafaxton, Texas 75011-5010, USA
- UK Importer: Pocketbond Ltd

**The Kit**
This new tooling of one of the USSR's first post-war jet fighters is made up of 31 light grey parts, two identical vac-formed canopy transparencies and 16 resin pieces. The larger plastic components have a heavy feel about them, but on the whole they are cleanly moulded with only a little flash. The moulding is crude in places, however, and smaller parts do need some cleaning up. There's a minimal level of surface detail of engraved panel lines, but then it was a simple plane in design. The resin parts, including cockpit interior, engine accessories and bulged wheels, are highly detailed and just need to be cut away from their bases, cleaned and sanded.

**Instructions**
These certainly are high quality. They come on four large sides and the 5-stage assembly instructions are clearly drawn. Especially useful are the close-up detail boxes showing correct alignment angles and the complex sub-assemblies. There's a black and white photo of a "Feather" and short description of the type, explaining that the Yak-15 was essentially an adaptation of the Yak-3 powered fighter mated to the jet engine from the Me 262. Finally there are printing instructions complemented by colour illustrations on the back of the box.

**Construction**
The parts to this kit aren't numbered, but as there are relatively few of them this doesn't present too much of a problem. Construction gets off to the usual start of assembling the cockpit but with the addition of attaching the jet exhaust to the underside of the cockpit flooring as well. There are no locating lugs or holes for the main fuselage halves, and one of the halves was slightly warped outwards, so the fuselage alignment has to be precise and well-cemented. A two-part wheel- well assembly needs to be fitted onto the lower wing half before the top wing half is fitted. I found later, when it came to attaching the main undercarriage legs into a wheel-well socket, that the wheel-well rear wall had to be fitted in exactly the right position, as shown in the assembly diagram. The joins for all the main components, fuselage halves, tailplanes, wings and fuselage-wing, required a little filler, especially the fuselage undersides.

**Accuracy**
Czech Model and Squadron/Signal both give the Yak's wingspan as 30ft 1.25m and length at 28ft 9.75m and both these dimensions scale up in measurement almost exactly. Looking at photos of the real aircraft, I found that the correct 'fit' of the plane was achieved only if the tailfins were fitted so that it didn't protrude too much.

**Colour Options**
Camoouflage and squadron markings for three aircraft are provided: an overall red painted plane of the Soviet air display team of 1948, a Yak in 1947 fighter service in overall light grey (FS 36375) and another in upper surfaces green (FS 34108) and lower surfaces light blue (FS 35526). I opted for the light grey option and matched it to the nearest Humbrol equivalent.

**Decals**
The decals are excellent; thin but with a rich colour density and a slightly glossy carrier film. The red stars match their white borders perfectly, and plenty of nose number options are given. I also managed to apply them without any silvery effect.

**Decal Rating = 9/10**

**Conclusion and Recommendation**
The inclusion of resin parts and a vac-form canopy, combined with the clean-up required on the smaller components, for me made this kit slightly more hard work than usual. For the more experienced modellers, I'm sure it would be a breeze; I especially liked the detail on the cockpit and wheel-well areas. As far as I know this is also the only 1/48th kit of the Yak-15 around, so I'm sure Russian fans will want to get it, although its hefty price tag of over twenty quid for the mixed quality on offer may make many think twice. Recommended - only just.

My thanks to Pocketbond for the review sample.
Messerschmitt Me 163B-1a ‘Komet’ & Scheuch-Schlepper

The Kit
The kit comes in a large box, considering the size of the model, but 95% of it is packing. The kit itself, once you find it amongst the packing material, comes in 16 sand-coloured resin and three white-metal parts with two vac-fum canopies, in case you mess up the first one. Let’s face it, in this scale it is likely. The resin castings are fairly rough with no surface detail except on the wings and tail. Flash abounds and the resin plugs dwarf the actual parts. The white-metal parts are very rough but overall it does look quite promising.

Instructions
These come on six sides of A4 paper. Side one is a five-view 1/144th scale plan plus specification data. Side 2 gives an exploded construction view of the aircraft with some notes on construction. Side 3 gives construction drawings and notes on the Schech-Schlepper recovery vehicle (yes, one of these is included in the kit). Side 4 gives sketches and notes for detailing the aircraft (in this scale that should be interesting). Side 5 gives a parts listing with some more detail notes and a list of current and future releases. Side 6 consists of general instructions for working in resin. Overall quite a good set of instructions.

Construction
As usual, with all resin kits, we start by washing all the parts in soapy water to remove old releasing agents. The parts are then removed from their plugs with a razor saw (it seems like you are throwing most of the kit away at this point), and then cleaned up. The white metal parts, the track units and movement arm for the Schech-Schlepper, are also cleaned up at stage. The aircraft consists of front and rear fuselage halves, wings, cockpit interior, vertical tail, vac-form canopies, wheels and doily. Ten parts in all, quite a lot for such a small kit. All parts go together very easily with minimal filler. Aerials and cannon were then added from sprue. As forecast, it took two attempts to get the canopy correct, which was fixed in place with Krytal-Klear. Next, we turn our attention to the tractor. This is made up from seven resin and three metal parts. These, again, go together quite well although I replaced the movement arm with one made from piano wire as I felt the kit part was vastly over scale. A tow-bar has also to be scratch-built from plastic, but this is mentioned in the instructions. A steering wheel was also added at this point and the model was now ready for painting.

Accuracy
As previously stated, a 1/144th scale plan is included in the instructions and the parts were placed on this, fitting exactly. The accuracy of the plans is obviously open to question so let’s compare it to some given dimensions. David Moonsey’s Axis Aircraft of World War II gives the aircraft as having a length of 5.84m and a span of 9.32m while the kit instructions give a length of 5.0m and a span of 9.3m. Both the model and the plans scale up to 5.76m and 9.08m respectively. The discrepancy in the span scales down to only about 1.7mm so in this scale 1 would say it is still pretty accurate.

Colour Options
No colour options are given in the instructions, however, two aircraft are given on the small decal sheet provided. Option one is for the Me 163B-la of 2/JGr40 and option two is for the Me 163 V41 of Erprobungskommando 16. The likely scheme for option one is a splinter of RLM 81/82 on the upper surfaces and RLM 76 on the undersides. Option two was RLM 23 (Rot) overall and this was the option chosen for the review sample. This was painted using Xtracolor X217 (RLM 23).

Decals
A small decal sheet is provided giving, as previously stated, two options. Unfortunately, on my example, the white was not printed so this had to be hand painted on the wing and fuselage crosses. This isn’t too much of a problem with the V41 but if you choose the 2/JGr40 option then the ‘White 10’ is not printed. Neither is the Staffel badge and no swastikas are provided. These were hand painted along with the “T” and “C” Staff stencils. As only the black is printed, register is not a problem but the clarity is not too good.

However, once on the model, they don’t look too bad. Adhesion was good and they reacted favourably to Micro Sol and Set. Decal Rating = 5/10.

Conclusion and Recommendation
Okay, what do you get for your sick squid? Well, you get a tiny aircraft measuring just 62mm x 40mm and a recovery vehicle just 60mm long. Doesn’t seem much, does it? Let’s put it in perspective. Firstly, there are just as many parts, if not more, than some of the larger, more expensive resin kits. Secondly, you get a few hours honest fun putting together what must be one of the smallest aircraft kits on the go. Six pounds wouldn’t run to a take-away and it certainly wouldn’t get you a decent night out. I therefore consider it good value and I heartily recommend it to anyone interested in 1/144th scale aircraft or anyone who just wants a change. I look forward to their next release.

My thanks to Starr Miniatures for the review sample.

Gordon King
Photography by Alasclair King

Grumman F8F-2 Bearcat ‘US Navy’

This kit is part of a range of Bearcats produced by Hobbycraft and is of the later tail tailed, cannon-armed version. On opening the box you are faced with a nice set of plastic mouldings and two decal sheets; more about them later. The instructions are in Hobbycraft’s usual pictorial style and is the one area which still lets down their presentation when compared to Tamiya and Hasegawa, though they are adequate in guiding you through the building process.

Construction
As is normal I started with the cockpit. This comprises a floor and sidewalls to which you attach a bulkhead, a two-part seat, control columns and rudder pedals. There is also a nicely engraved instrument panel which benefits from a little gentle dry brushing to bring out the details. This area requires brass seatbelts and the sidewalls could also do with some brass extras. (No doubt by the time you read this, Eduard will have something suitable for this kit). The cockpit is painted overall Cockpit Green and gives a nice representation of the real thing. Then onto the wings with parts A6 and A12 glued to the bottom wing. This provides full air intake details which is a noticeable feature of the undercarriage bays of a Bearcat. Do not forget to open up the holes in the wings for the weapons and to help locate the cannon bungs on the top wing (guess who did it). The fuselage and wings are then joined together and needed no filling. The tailplane and tailfin were fitted and a small amount of Tipped was used on the tailfin joint. Overall the fit of these parts was excellent.

A nice five-piece engine assembly was added to the completed fuselage and the undercarriage and drop tanks were attached. You are also supplied with four rockets, but, as I had forgotten to drill out the mounting points, these were donated to my spares box. The only correction I made was to the position-keeping lights moulded on the upper and lower wings. These are moulded quite large, almost like landing lights, and as they were not visible in photographs of the real aircraft I filed them in with Milliput. The landing light and navigation lights are moulded in clear and needed a slight amount of trimming to fit. They were then painted red and green with Humbrol Clear Colours. The whole aircraft was now painted US Sea Blue with a coat of gloss varnish using AeroMaster Acrylics. After the decals were applied the gun barrels and exhaust pipes were drilled out and glued in place. The final touches were the aerial wire from knitting-in-elastic and the hinge lines of all control surfaces were highlighted with Citadel Miniatures Black ink wash and a small amount of chipping with Citadel’s Mithril Silver paint on panel lines and cockpit sides.

Accuracy
The real aircraft has a length of 28ft 3in. and a wingspan of 35ft 10in, according to James. The model’s wingspan is spot on but the length appears to be about a foot short. There is also a question on the accuracy of the engine cowling, but I am not a micrometric modeller and it looks like a Bearcat which is good enough for me!
Decals
Now as I mentioned at the beginning of the article you get two sets of decals; the first set is for two US Navy versions and both options are painted in the normal Navy Blue of the 50s:
- VF29 on the USS Leyte in 1949, coded '210' with a white tip to the tail and propeller boss.
- VF51 on the USS Boxer in 1950, coded '103' with a red tip to the tail and propeller boss and red and yellow strip on the rudder, trim tab and at the base of the rudder.
These markings thin and with a good density of colour which does not change over the dark surface colour. They reacted well to Micro Set and Micro Sol and are a vast improvement over the decals that used to be supplied in Hobbycraft's early days. Now on to the second set. Here's a new idea, transfers for the canopy frames are supplied in Silver Black and Blue and though initially sceptical about these they fitted like a dream. The only problem was the shade of blue used which was more like Blue Angels Blue than US Navy Blue. No problem, I just overpainted them on the sheet before application. It gets better though, because once applied to the canopy I noticed that the exterior colour was printed over a representation of Interior Green which now showed through on the inside of the canopy. An excellent idea which I hope becomes a feature of all their new kits.
Decal Rating = 9/10
(Canopy Frames = 10/10)

Conclusion and Recommendation
Well I can't deny that I was looking forward to this kit and it did not disappoint. Minor scale differences aside, it captures the look of a Bearcat, just sitting on my bench it looks like it wants to fly! Hobbycraft now rate up there with the top names in the hobby in my eyes and I have even purchased another one to build in Blue Angels marking. For me to purchase two kits of the same type is almost unheard of, and just goes to show how much I enjoyed this one! As a basic kit it is very good and combined with an etched-brass set, this would be a winner. Go out and buy one, you won't be disappointed. Highly recommended.
My thanks to PocketBond Ltd for the review sample.
David Francis

Potez 452 Flying Boat

The Kit
Blimey! What an aircraft. I have never seen anything quite like this before. Such an unusual design. I love it. First impressions of the parts are very encouraging. Larger pieces are bagged together in one of those re-sealable polythene bags and the smaller pieces are together in two smaller bags. There's a piece of thin clear card to form the windscreen that is surprisingly unbowed and the decal sheet looks very colourful but it too is left to float about in the box. Unfortunately one of the fuselage halves was initially missing from this review sample, but it was later replaced by Choroszy Model.

Instructions
The instructions are a photocopy of reasonable quality which gives an exploded assembly view, two side views of the two-colour schemes, two corresponding plan views and a single front elevation. All of these drawings are slightly smaller than 1/72nd. Also on this single sheet is the history of the aircraft, its construction and

Technological Data

Manufacturer: Choroszy Model
Scale: 1/72nd
Status: New Tooling
Panel Lines: Engraved
Fabric Effect: Raised
Price: £16.60
Type: resin, Parts: Resin 46
Decal Options: 2
Manufacturer: Choroszy Model, 32-070
Nowow, Czernichow 511, Poland.
Tel: 48-16/47 06 04
UK Source: Aeroclub

The Model

1/72
Potez 452

Final assembly instructions

Construction
This is a resin kit so a razor saw is essential. Everything, even the struts, has a moulding block attached. I can understand this for certain parts like the fuselage halves and the wings, but why have the struts been cast in resin? Surely it would have been more cost effective to include a few lengths of plastic rod instead. Extreme patience is needed to separate the casting blocks as the parts are superbly detailed and very delicate. I built this kit at the same time as the LOIRE 210 by Pend Oreille and had virtually completed that whilst I was still at the part-fitting stage with this! Super glue is needed throughout (except for the clear card, use Clearfix or something similar) so you are guaranteed some fun with fingers sticking together. But, apart from the mass of struts, all goes together easily. There is also a nice beech trolley included which is made from eight well detailed parts. The engine cowling is amazingly thin but to scale and the radial engine that fits inside it is magic. There is a lot of detail here, most of which is unseen once placed into position, and that is a shame.

Accuracy
I don't know I've never come across this aircraft before. It looks as though it could have struggled into the air and stay aloft once landed but apart from that I was unable to find any detailed information about the dimensions of this particular machine. The effort that the manufacturer has put into this kit gives me the impression that the overall dimensions will be pretty close to what they should be.

Colour Options
Two options are offered on the decal sheet but if you read the instructions you can squeeze a third option out of the kit. Option 1 is for a machine from the Bougainville slope, Section d' Hydravions de la Marine, in Sevres during the winter of 1940/41. This is Light Sea Grey/Green (close to FS 34242) overall. The hull underside is matt black. The painting guide gives the impression that a large red rectangle should be painted behind the fuselage roundel but in fact this is the location for the SMH-7 code which is supplied as a decal. This version carries the large wing roundels which should have the black anchor superimposed on them. There is a note from the manufacturers saying that these anchors were mistakenly omitted but will be forwarded to the dealers.
Option two is similar to the first and represents Potez 452 No. 3 from La Grandiere slope. Stuttgart, North Africa, November 1942. However, the wing roundels are smaller and the engine cowling, tailplane and fin have red and yellow stripes. The tailplane and fin stripes come as a decal but the cowling will have to be painted.
Option three is the same as option two but without the red stripes and represents the same machine just after the Armistice but prior to 1941 when the stripes were added; this is the version I went for, as you can see.

Decals
The decal sheet is a fair size and is of excellent quality with glossy images and hardly any carrier film. I had no trouble at all when applying the decals and didn't need any setting solvents either.
Decal Rating = 10/10

Conclusion and Recommendation
I predict that this kit, along with the LOIRE 210 by Pend Oreille, will be the centre-piece of the French Special Interest Group's display at the 'Tedford IPMS Nationals in 1999! This is one of the most enjoyable kits I have built for a long time. It's not that it goes together perfectly; you still have to use some modelling skill to make it all work. If I may offer some constructive criticism, I'd question the use of resin for struts. I don't mind a bit of hard work but the operative word here is 'bit'. These really are a swine to clean up from the casting blocks. Also there were a number of parts missing, only small items that are easily made from plastic rod or card, but there's really no excuse for this. The only other point is part 12, which is the upper portion and cockpit surround on the fuselage. This, unfortunately, is cast with a slight bend, that I only noticed upon completion. You will have to do some major modifications to this item to get it straight and true.
Very highly recommended but only to experienced modellers!
My thanks to Choroszy Model for the review sample.
Lee Thomson
Nieuport 11

Technical Data

Manufacturer: Toko
Scale: 1/72nd
Status: New Tooling
Fabric Effect: N
Panel Lines: Engraved
Price: £4.99
Type: Injection Moulded Plastic
Parts: Plastic 40
Options: Le Piètre rockets
Decal Options: S
UK Distributor: Pocketbond

The Kit

Two sprues of well defined, delicately moulded, strong light grey plastic with minute traces of flash confirm a quality product as soon as the box is opened. There are no clear parts and it turns out that the strange lump round the front of the cockpit accurately represents the substantial contours of the early windscreen fitted. All the modeller has to do is remove plastic where the clear vision part should be and add Clearfix, or similar, for an accurate rendition of the original.

Instructions

These are comprehensive and comprise a loose leaf eight page booklet with ported type history and technical specifications in English, Russian and German, sprue identification diagram, helpful hints, just over two pages of exploded construction diagrams and three pages of painting and decal instructions.

Inclusion of a warning to paint the underside of the top wing and add decals there before fixing, rigging diagram and a front elevation would have spelt perfection.

Construction

This is straightforward with the delicate parts separating from the sprue without anticipated drama with the judicious use of a scalpel with a new sharp blade. As rigging details are absent from the instructions separate references will be required and any locating holes best drilled before construction commences.

Pursuits will need to open out angled slots on each side of the tailplane just outboard and forward of the tail struts to allow the control cables to pass from the upper control horns on the elevators to the fuselage. (The control horns require fabrication from the thin styrene sheet.) These are clearly visible on many photographs and shown in the scale plans in contemporary reference material. The box art rendition is accurate in this respect.

I needed a little filler on the fuselage fore and aft of the lower wing.

Dry fitting of the struts to their locating sockets is essential to ensure that the ends fit and not proud. I failed to do this the first time around and the front cabane struts and rear undercarriage struts were too long till the recesses were deepened and the pegs cut to fit.

The eagle-eyed will notice that the port aileron is short on chord inboard and this gives a saw toothed trailing edge. This is easily resolved by cutting out the control surfaces and adding a wafer of plastic on the leading edge before reattaching or, as with this review model, merely scoring along the hinges lines and deflecting the control surfaces in realistic attitudes.

A jig may help top wing alignment, but isn’t essential. Fitting the 'V' wing struts and rear cabane struts to the top wing in proper alignment and allowing to dry thoroughly before fitting to the fuselage and lower wing, will give a very satisfactory result.

It seemed a good idea to paint the model silver and add all decals after attaching the lower wing to the fuselage. However silver is a soft paint and this meant that I spoiled the finish on the aft fuselage underside and top wing with handling during the later stages of construction. With hindsight it would have been better to leave the rear fuselage, the underside of the lower wing and the top of the upper wing unpainted till the later stages of build and so avoid this problem.

Accuracy

Close study of original in photographs has convinced me that this is a very well researched model and I believe that it is accurate to less than 2% of error according to the tables in Harleyford’s “Fighter Aircraft of the 1914 -1918 War”, being very marginally short on span and length. (Slightly different dimensions are quoted for Le Rhone and Gnome mono powered versions, while the dimensions given in the instruction leaflet for the lower wing are I believe incorrect.)

Decals

These were glossy, sharp, well printed, in register with good density. The skull and crossbones of Kazakov’s Nieuport was slightly larger than the rudder and so some of the white outline was trimmed away otherwise they applied and conformed well to the model’s surface.

I could not find good prints of the originals to confirm their accuracy. A photograph of ‘Vieux Charles’ captured ‘Le Miroir’ 9th April 1916 has Guynemer’s Nieuport wearing Roman lettering ‘le Vieux Charles’. I suspect Guynemer had more than one aeroplane at his disposal in 1916 and that the photograph may have been a hastily contrived publicity shot. A later photograph of the ace’s SPAD displays the italic lettering version provided by Tolo.

All this goes to show that modellers demanding the highest fidelity need to check references carefully.

Decal Rating = 8/10

Conclusion and Recommendation

This kit is a little gem. It isn’t perfect, but at the price it is probably as close as you can get with accurate delicate mouldings robust enough to stand the rigours of construction well.

This may not be a kit for an absolute beginner, but providing a logical construction sequence is adopted and the kit treated with the respect it deserves, good results should be achieved.

The fabric effect is a question of preference. Tolo’s rendition is one of the most delicate around, but I would settle for an accurate representation of stitching /creasing /sag etc., and leave the rest to the modeller.

My thanks to Pocketbond, who may be pleased to know that I have voted with my wallet and purchased further copies of this excellent kit with a view to producing all the decal versions offered!

Simon Snape

REVell - doing more for the modeller
**Sopwith 1 ½ Strutter**

![Sopwith 1 ½ Strutter](image)

**Technical Data**

<table>
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<th>Manufacturer</th>
<th>Flashback</th>
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**The Kit**

This kit is supplied in a large (for the size of the kit) box and a brief history is given on the side. Inside are the instructions, a decal sheet, and three plastic bags. The first bag contains a grey injection-moulded sprue with only a little visible flash and nice engraved detail. Some of the parts are quite large and will require careful trimming. The second bag holds the resin pieces for the cockpit detail, machine guns and the rotary engine. The final bag contains the etched-brass detail set and an acetate film for the instrument panel. No pilot or observer figures are supplied.

I was under the impression that the 1 ½ Strutter was a two-seat aircraft until I did some research and found it was produced in both a single and two seat configuration. When it entered service in 1916 it was the first aircraft to have air brakes and a variable incidence tailplane. It was also the first British aircraft to use the synchronised machine gun to fire through the propeller arc.

**The Instructions**

The instructions are on two sides of folded A3 paper. One side is devoted to the exploded assembly guide and detail painting instructions, while the other side is split into four sections: a numbered parts diagram, control and bracing wire diagrams and two alternative colour schemes.

There are a couple of unused parts on the sprue for blanking off the rear cockpit, so I assume a single-seat version may follow (already released - Ed). Early on you have to decide which version you are going to make, the RFC or French model, as there are several differences, namely the rear gun mount, engine, top wing (the RFC having the fabric removed above the cockpit) and the propeller. There will therefore be a few more nice spares for your bits box from this model.

**Construction**

I started by trimming the raised pins from the ejector pins from the inside of the fuselage halves and then painted the area Humbrol Light Buff (No. 7) inside and out. The etched-brass sheet was given a coat of primer and left to dry. The cockpit floor was painted Wood Brown, the fuel tank aluminium and the wicker pilot’s seat a light brown with the seat cushions painted a very dark brown to represent leather. The individual parts on the etched sheet were now painted; the fuselage frame and instrument panel Wood Brown and the trim wheels, control column and throttle lever matt black. The instrument panel support was painted aluminium, the rudder pedals silver and the pilot’s seat straps light brown with silver buckles.

Once all was dry the cockpit floor was gently sanded off its resin base and the seat straps, control column, rudder pedals and instrument support strut glued into position. The etched fuselage frames were stuck to the inside of the fuselage sides and the trim wheels and throttle quadrant added. The back of the acetate instrument detail was painted white and left to dry. It was then glued to the back of the instrument panel and the whole thing glued into position on the right fuselage half along with the completed cockpit assembly before the two halves were finally joined. Just a little trimming and rubbing down of the joint was needed. The observer’s foyer was fitted (it needs trimming and rubbing down quite a bit) along with the tailplane. The rotary engine (previously painted Steel) was trimmed from its resin backing and glued to the fuselage front with the cowling added afterwards. No problems there, with a little work the engine and prop could be made to turn. The machine guns were painted Gunmetal, the etched fairing over the trigger bent into shape and glued on the front gun, then carefully put to one side to dry.

The lower wings have two small locating pegs on them and the fuselage mountings need the marked holes drilled out. I found that the right wing mounting needed trimming as the fuselage was a bit lumpy here and the holes do not line up correctly, needing elongating slightly to compensate. The fit of the wings is quite good overall though, needing no filler at all to the joints. At this stage I decided to apply the tail, fuselage and lower underwing decals (see ‘Decals further on’). Once dry a coat of Johnson’s Klear was put over to seal them. Next I attempted to use the etched brass control surface fulcrums, but most of them pinged out of the tweezers never to be seen again. Instead I used a thin sheet of plastic and cut it to shape using one of the brass bits as a template. These were then glued to the tail surfaces and lower wings and left to harden off. The tail control wires were then made up out of grey cotton and glued into position. I made up a cardboard template to get the correct angle when I glued the mainplane struts into position, using the instructions as a guide. The front machine gun was glued into position at this stage. The flattened ‘W’ top wing struts were glued to the fuselage and once set the top wing fitted. I found the outside struts of the ‘W’ were a little long and needed shortening by about 1 mm. The top wing struts were put on and Johnson’s Klear applied once dry. The fusilier fulcrums were then glued on ready for the rigging to be applied. Before this I fitted the undercarriage minus the wheels and the tail skid. The etched-brass rear machine gun mounting was then made up and fitted (fiddly job bending and gluing this bit). Why does superglue stick best to me rather than the parts I want glued together?

Small holes were made in the ailerons on the top and bottom wings to take the control wires and these and the rest of the rigging wires were added. The wheels, propeller, lower cowling fairing and rear machine gun were then installed to finish off the model. The cowling was painted gloss red, the forward fuselage silver and the propeller Wood Brown, dry brushed over with two different shades of brown and then varnished. The wing struts were also painted in a similar manner to the propeller.

**Accuracy**

There is no technical data listed with the kit. The Encyclopedia of World Aircraft gives the dimensions as: span 10.21m (33.56m) and length 7.97m (26.1ft). My model scaled up as 10.3m (33.81ft) and 7.67m (25 ft 4 in) in length. So it scales up slightly oversized, but very close, although it is very difficult to measure these small models. The wing and tail shape look right. The lower wing has about 1 degree of rearward stagger, while the top one is straight. It certainly looks right to me: AMC have done their homework on this one.

**Colour Options**

Two are given: an RNAs example of No 3 Wing in Olive Drab with doped linen undersurfaces, and a French Air Force example of the 226 SOP Escadrille in overall doped linen with a red engine cowling.

I decided to make the French version as the colours and markings are a change from the usual drab colours of British machines of this period. No FS numbers or paint references are given on the instructions.

**Decals**

The decals look crisp, thin and opaque with very little visible carrier film. However, the British fuselage decals were slightly out of register.

Unfortunately they are very brittle, tend to curl, crinkle (if you are not careful) and do not slide off the backing sheet easily. They reacted alright toMicroSol, but I did not tryMicroSet, as the decals are very thin.

I had to touch-up several decals due to cracks and scratches caused when applying them. There was no sign of silvering though.

**Decal Rating = 6/10**

**Conclusion and Recommendations**

At £7.95 this kit represents good value for money as you get a detailed resin and etched-brass interior, two sets of decals, a cast resin engine and detailed rigging instructions.

The instructions do not tell you to add the decals before putting on the fulcrum levers and the rigging, which could catch the inexperienced modeller out. I enjoyed making this model and, for a balsa kit, assembly is quite straightforward with few hidden pitfalls (I must try to find some finer wire or thread for the rigging).

Highly recommended to all but the most inexperienced modeller.

My thanks to Hannants for the review sample.

Mike Kingsley

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**Revell**

**Thank You**

Scale Aviation Modeller International would like to thank Revelly’s Binney & Smithy (Europe) Ltd for the generous supply of paints and accessories from their extensive range for use by the review team throughout 1999.

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**AeroMaster**

**Thank You**

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4, 71, 92, 130 Sqn. RAF. Tempest Mk.II
33 Sqn. RAF. Mustang Mk.IV 19 Sqn. RAF.
K4/2: Spitfire Mk.I 19 Sqn. RAF. Hurricane Mk.II 111 Sqn. (both prewar)
Seafire IIC 880 Sqn. Seafire IB 731 Sqn. FAA. Spitfire Floatplane.
K4/3: Bomber Command/100 Gr.: Fortress Mk.IIB /Liberator MK. VI 214/ 224
BS Sqn. 100 Gr. RAF. DH Mosquito Mk.VI B517 100 Gr. RAF.
Mosquito Mk IX 105 Sqn. RAF.

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True Details

Subject: North American P-51, A-36 & P-51A  
Scale: 1/48th  Product No.: 48481  
Type: Cockpit Detail Set  Parts: Resin 8  
Designed for: Accurate Miniatures kits  
Price: £8.95

Set 48481 for the P-51, A-36 and P-51A

This offers a completely new resin interior to replace that in the Accurate Miniatures kit. The new resin parts consist of the floor, each sidewall, instrument panel, seat (with moulded harness), armour and radio compartment. Now, I am no expert on the early P-51 series, but it struck me that the evolution of the design may result in differences in the cockpit layout (remember the A-36 was a dive-bomber after all). So, off to my trusty copy of Bert Kinsey’s excellent title on the P-51 in the ‘Detail and Scale’ range (also produced by Squadron). Part 1 of this two-part coverage deals with the prototype through to the P-51C and there are a mass of current, and period illustrations of the cockpit interior. What is my assessment therefore? Well, basically no set can truly be for the P-51, A-36 and P-51A, and therefore really all this set covers is the P-51A.

The level of detail on all the resin parts is very good, and the whole set will add a little extra to the kit’s interior if you can’t be bothered to add it from scratch.

Overall this is a simple way of updating the existing parts in the Accurate Miniatures kit if you really must.

Subject: Focke Wulf 1900-9  
Scale: 1/48th  Product No.: 48482  
Type: Cockpit Detail Set  
Designed for: Tamiya kit  
Parts: Resin 7  
Price: £8.95

Set 48482 for the Focke Wulf 1900-9

Now this is a set that had me scratching my head, as the header on the packaging states that the set is for the “Hasegawa kit. Can be modified to fit Dragon kits”. News to me, I did not know Hasegawa had made a D-9 in this scale! In fact the header is in error, as the instructions state that the set is for the Tamiya kit.

The set consists of a new cockpit tub, sidewalls (with little or no detail), instrument panel, rudder pedals, control columns and seat with harness. The set has been accurately modelled on the interior of the preserved D-9 at the USAF Museum I suspect, as the details are clearly shown in Squadron’s ‘Walk Around’ title on the type. The level of detail is good, although oddly the throttle lever is missing from the port side console and there is no mounting bracket for the gunsight on the top of the new instrument panel. The seat also features nicely moulded seat harness detail, although with any Fw 100 the shoulder belts mount onto the upper fuselage decking behind the seat, and those on this seat will not allow you to do that.

Overall, another good set, although whether you feel that the Tamiya or Dragon kits truly need any interior update is up to you.

Tom’s Modelworks

Subject: Nieuport 24/24bis/27  
Scale: 1/48th  Product No.: TMCC006  
Type: Conversion Set  
Designed for: Eduard Nieuport 17 kit  
Parts: Resin 5, Etched Brass SS & Decals  
Price: £26.49

The resin components

This is a beautiful conversion based around the Eduard Nieuport 17 kit and it allows you to make one of three different versions. The set comes in a stout box, with a colour label and inside you will find bags separately containing the resin, etched brass and decal sheet. The set is backed up with a clear instruction diagram and a very nice colour painting guide.

Conversion of the Eduard kit differs depending on which option you go for. Therefore each is clearly described in the instructions. The Nieuport 24bis simply has the entire fuselage replaced with the new resin example. The Nieuport 24 requires the new resin fuselage, the entire tail and rudder replacing with new resin parts.

The etched brass fret

Each of the above sets now includes colour instructions for the detail painting of the new resin parts. These look to be computer generated (‘flat’) and although they will be of assistance to the less knowledgeable modellers, I suspect most experienced modellers will give them less than a passing glance.

Our thanks to Pocketbond Ltd for the review samples.

Information

UK Enquiries: Pocketbond Ltd, PO Box 60, Welwyn, Herts. AL 8 ON  
Tel: 01707 397160  Fax: 01707 327406  
Manufacturer: True Details, Squadron Products, 1115 Crowley Drive, Carrollton, Texas 75006-0001, USA.  
Tel: 214 242 1485  Fax: 214 242 37 75

Examples and the upper wing of the kit part has to be reprofiled in accordance with the diagram in the instructions. The Nieuport 27 requires the new resin fuselage, the new tail rudder, a scratchbuilt tail skid (illustrations provided) and a reprofiling of the upper wing ailerons.

The instructions also note that if you wish to make the Nieuport 25 from the Eduard kit, you will have to obtain the new engine cowling from Rosemont Hobbies in the USA, so this set could offer four versions! There are three marking options, one for each type, and these are:

3. Nieuport 27, B3607, flown by Lt. William MacLanahan of No. 40 Squadron, RFC.

The quality of all the parts offered in this set is excellent. The etched-brass frets offer a mass of generic details suitable for all of the options offered in the conversion, and I am sure that those left over will soon find a home within any WW1 modeller’s ‘pending pile’ of kits. The resin parts are finely cast with excellent fabric effect and the fuselage halves even have the internal structure moulded onto them.

This is a stunning set, and one I would highly recommend to all WW1 fans.

Our thanks to Tom’s Modelworks for the review sample.
ARBA Products

**Subject:** Focke Wulf Fw 190D-11 & D-13
**Scale:** 1/48th
**Product No.:** CK076
**Type:** Conversion Set
**Designed for:** Tamiya Fw 190D-9 kit
**Parts:** Resin 1
**Price:** £2.15

**Subject:** Focke Wulf Ta 152 Tail Fin & Rudder (CK077)

What you get in this set is exactly what it says on the label, namely a wooden vertical fin and rudder suitable for the Ta 152. This fin and rudder are complete with the aft fuselage up to the rear transit joint, so fitting them to a suitable Fw 190 kit should prove fairly simple (although this product is designed to fit the Tamiya D-9). The reasoning behind such a product is that for some late-series Fw 190s actually had the Ta 152 series wooden tail unit fitted, so ARBA are offering this should you wish to build any of these versions. I think that a number of the decal options on some recent sheets from KommanDeur had such machines on them, so this conversion is very welcome.

Our thanks to ARBA Products for the review samples

**Information**

**Worldwide Enquiries:**
ARBA Products, 80 Lawrence Road, Brightwaters, Bedfordshire. SG18 0LU
Tel: 01727 315580

**CREATE 301**

**Subject:** Nakajima A6M2b
**Scale:** 1/48th
**Product No.:** AE-02
**Type:** Update Set
**Designed for:** Hasegawa kit
**Parts:** White Metal 6, Resin 1, Etched Steel 6
**Decal Options:** 5
**Price:** ¥TBA

**Subject:** Focke Wulf Ta 152 Tail Fin & Rudder (CK077)

This conversion will allow you to make the late series D-11 and D-13 from the existing Tamiya D-9 kit. It comprises a nicely cast set of forward engine cowlings, a new upper cowling decking, supercharger air intake and a new spinner and propeller blades. Each part is very well cast and is easily as good as the best resin sets currently available from the USA. Each part is offered as a direct replacement for the kit part, and the only surgery you will have to do is to cut the extreme nose off. This however is quite easy, as the outline is also a panel line.

An excellent, yet simple conversion that will allow you to add one of the late series Fw 190s to your 1/48th scale collection.

**Subject:** Focke Wulf Ta 152 Tail Fin & Rudder
**Scale:** 1/48th
**Product No.:** CK077

This firm will be new to many of you, as it was to us until recently. They produce a massive selection of high quality resin and metal conversion sets for just about every version of the A6M Zero series, which include a product familiar to many of you; AeroMaster decals!

This set allows you to convert a Hasegawa A6M2b into a Nakajima-built fighter-bomber version and it comprises a new white-metal seat, propeller and IJN medium bomb rack, plus the IJN Type 99 250kg bomb made up of a resin body and etched-steel fins and fuses.

The level of detail on all of these parts is of the highest quality, and the whole product is only slightly marred by the lack of English instructions to clarify certain details (or is it my inability to read Japanese?).

Once you have converted your Hasegawa kit into this type, you may be scratching your head about colour options, not so with this product. An excellent decal sheet printed by AeroMaster includes markings for five machines, although once again the only instructions are in Japanese.

This is a real gem of a set. I would suspect than many Japanese aircraft fans will be looking to obtain this set, and once you have the entire list of some 30 A6M conversions and updates available from CREATE 301, there will be no stopping you!

Our thanks to CREATE 301 for the review sample.

**Information**

**Worldwide Enquiries:**
CREATE 301, P.O. Box 52, Yazu City, Shizuoka 425-069, Japan.
Fax: 011 82 54 629 9499

Copper State Models

**Subject:** Fokker Dr.I
**Scale:** 1/32th
**Product No.:** CSM #121
**Type:** Detail Set
**Designed for:** Revell® or Hobbylcraft kits
**Parts:** Etched Brass 46
**Price:** $8.99

This set offers a number of details for the Revell® Hobblycraft kits and consists of:

1. New seat belt buckles
2. Seat belt adjusters
3. Ammunition box
4. Throttle quadrant
5. Air pump handle
6. Cockpit rudder control horn
7. Rudder control horn
8. Wing control horns
9. Tailplane control horns
10. Manufacturer's nameplate
11. Control wire grommets
12. Top wing inspection plate
13. Four sets of fuselage 'stitching'
14. Petrol tank cap

Each piece is clearly etched and in this big scale, the set will certainly add a lot of detail to either kit.

**Subject:** Fokker D.VII (CSM #123)

This set is designed for the Revell® kit and it offers the following details:

1. Seat belt buckles
2. Seat belt adjusters
3. Magneto (three-part)
4. Instrument panel handles (x3)
5. Instrument switch plates (x5)
6. Triggers
7. Rudder tread plates for cockpit floor
8. Air pump handle
9. Water pump face
10. Instrument panel warning placard
11. Control wire grommets (x21)
12. Wing control horns
13. Tailplane control horns
14. Rudder control horns
15. Throttle quadrant

Once again each piece is clearly etched. The problem with this set is that it’s rather like putting a ribbon around your wasteband, as the Revell 1/28th scale kit is so inaccurate to start with! That aside, I am sure many WWI fans will be able to utilise this excellent set.

Our thanks to Copper State Models for the review samples.

**Information**

**Worldwide Enquiries:**
Copper State Models, 3245 E. Hilyer Drive, Phoenix, AZ 85002, USA.
Tel: 602 867 8822
The figures have the heads separate, and the seated example also has the arms as individual pieces. The level of detail on all parts is very good, and the facial expressions are nicely worked. The set comes with an A4-sized instruction sheet that not only gives a diagrammatic assembly sequence, but also lists all colours required by FS numbers.

Subject: WW1 French pilot running in flying suit
Scale: 1/48th
Product No.: 48PO-A241
Type: Figure set
Designed for: N/A
Parts: Resin 7
Price: £3.50

Once again, this offers a complete set of replacement control surfaces for the Classic Airframes kit. The set features excellent fabric effect on each part, and there are also new tailplane sections for you so you don't have to worry about the accurate removal of the elevators from this area of the kit.

Each of these sets can be highly recommended and it is nice to see subjects such as the French Air Force in WWII getting coverage at last.

Our thanks to POMK for the review samples.

Information

Worldwide Enquiries: Pend Oreille Model Kit, P.O. Box 9967, Spokan, WA 99208-0967, USA
Tel/Fax: 509 327 2561
Belcher Bits

Three new sheets, one in 1/72nd and the remaining two in 1/48th scale, have been passed directly to us by Belcher Bits.

1/72nd Scale

BD3 Canadian Helicopters

The decal sheet from BD3

This sheet offers the following options:

1. BD3-2, S/No. 961 on HMCS Magnificent in 1953. This machine is Dark Grey 501-102 (similar to Extra Dark Sea Grey) over Light Grey 501-106 (similar to Medium Sea Grey).
2. H-4, S/No. 253 on HMCS Bonaventure in 1958. This machine is in the same scheme as the previous option.
3. Sikorsky CHSS-2, S/No. 4003 of HS-50, RCN, in 1963. This machine is Dark Grey over Light Grey with the nose, tail band and horizontal stabiliser in dark grey.
4. CH-124A, S/No. 12438 in 1974. This machine is Grey 501-109 (similar to Boeing Grey although no FS equivalent is applicable).
5. CH-124A, S/No. 12438 of No. 443 Squadron on HMCS Huron in 1991. This machine is Medium Grey (FS 26713) overall.
6. Sikorsky HH-5, S/No. 9604, RCAF in 1954. This machine is yellow overall.
7. Sikorsky H-19, S/No. 9626 of No. 108 Comin Fleet in 1955. This machine is Red 509-102 (FS 13110) over Blue 502-103 (FS 15065) separated by a 2" white chevron.
8. H-34, S/No. 9633 of No. 108 Comin Fleet in 1955. This machine is in the same scheme as the previous option.
9. CH-136 Kiowa, S/No. 136213 in 1971. This machine is Grey 503-102 (FS 14097) overall with Yellow 505-101 (FS 13358) nar doors, engine cowling, stabilisers and 33" tail rotor band.
10. CH-136 Kiowa, S/No. 136207 of 3CFHATS, c.1980. This machine is in the same colours as the previous option, but the yellow has been expanded and is bordered with a narrow white chevron.
11. CH-136 Kiowa, S/No. 136219 of 10 TAG c.1980. This machine is Grey 501-302 (FS 36099) and Green 503-301 (FS 34064) in a camouflage pattern overall.
12. CH-136 Kiowa, S/No. 136228 of 10 TAG c.1987. This machine is in the same scheme as the previous option, but the grey has been replaced with Green (FS 34005).
13. CH-139 Jet rigger, S/No. 139905 of 3 CFHATS c.1987. This machine is in a similar scheme to option 10 (not 4 as noted on the instructions).
14. CH-118 Iroquois, S/No. 118103 c.1980. This machine is Green 503-102 (FS 14097) overall with Red 509-102 (FS 11310) engine cowling and stabilisers and a 36" yellow 505-101 (FS 13358) band on the tailboom.
15. CH-118 Iroquois, S/No. 118102 of the Base Rescue Flight, CFB Cold Lake in 1973. This machine is white overall with the nose, engine cowling and fuselage and tailboom bands in red.
16. CH-118 Iroquois, S/No. 118104 of the Base Rescue Flight, CFB Chatham in 1980. This machine is Yellow 500-101 (FS 13358) overall with a red band bordered in black around the fuselage.
17. CH-135 Twin Huey, S/No. 135135 of the SAR Flight, CFB Trenton in 1985. This machine is in the same scheme as the previous option.
18. CH-135 Twin Huey, S/No. 135132 of 10 TAG in 1975. This machine is Grey 501-302 (FS 36099) and Green 503-301 (FS 34064) camouflage over Light Grey 101-327 (FS 36270). Note with this example that the side numbers ‘132 are NOT included on the decal sheet, as the manufacturer could not fit them on!
20. CH-135 Twin Huey, S/No. 135131 of 10TAG c.1987. This machine is Green (FS 34005) and Green 503-301 camouflage overall. Apart from the omission listed, the decal sheet includes all the unique markings for each option plus a selection of national insignia and stencils.

1/48th Scale

BD4 Canadian Harvards

This sheet offers markings for the following five machines:

1. Harvard II, 2905 of an unknown RCAF unit in 1947. This aircraft is Trainer Yellow overall with red and white stripes on the rudder and engine cowling.
2. Harvard II A, 2757, TF-41 of the Operational Training School, RCN, Shick,flater, Nova Scotia in 1949. This machine is Trainer Yellow overall with a black anti-dazzle panel.
3. Harvard II, 5188 of VC 920, RCAF Reserve, Downsview, Ontario in 1957. This aircraft is Trainer Yellow overall with the rudder in white and red stripes and the cowling red.
4. Harvard II, 2564 of No. 4 Service Flying Training School, Saskatoon, Saskatchewan in 1941. This machine is Dark Earth and Dark Green over Trainer Yellow with yellow panels on the upper wing panels, fuselage decking and tailplanes.
5. Harvard II, AJ955 of No. 2 Wireless School, Sheppard, Alberta in 1943. This machine is Trainer Yellow overall with the engine cowling in black and red checks (supplied as decals).

The decal sheet includes all the unique and national markings for each option, but no stencils.

BD5 USN SNJ-2, SNJ-4

This sheet offers schemes for the following six machines:

1. SNJ-2, BuNo. 25662, NAS Jacksonville in 1945. This machine is Light Grey overall with the rudder and control surfaces in dark aluminium.
2. SNJ-2, BuNo. 25662, NAS Jacksonville in 1945. This machine is Light Grey overall with the rudder and control surfaces in dark aluminium.

Copper State Models

1/28th Scale

CSM #118, Fokker D.VII Werner Voss

This sheet is intended for use with the Revell® or Hobbycraft kits of the Fokker D.VII although the instructions and packaging state that the markings are for the Fokker E.I.

The simple sheet contains the national markings (on white bands) for the wings and fuselage, as well as the cross for the tail. The face painted onto the front of the engine cowling is also supplied, along with the aircraft data panel for the port fuselage side, the manufacturer’s construction data and even the manufacturers logos for the propeller. Surprisingly no diagram of the aircraft is included with the decals, there is just a narrative sheet telling you how the aircraft was painted and marked.

Overall the decals are all well printed and will certainly make for an interesting looking model once applied. The total lack of any text

markings if they have an interest in this subject. The sheet retails for $5.99 and is available in the UK via Aerocib.

Our thanks to Copper State Models for the review sample.

Worldwide Enquiries:
Belcher Bits, 33, Prince Street, Stittsville, Ontario, K2S 1P3, Canada.
Tel: (613) 836 6575
Email: belcher@mondenet.com

Worldwide Enquiries:
Copper State Models, S245 E. Hillery Drive, Phoenix, AZ 85012, USA.
Tel: 602 867 8822

Prices: Please note that all foreign prices quoted within this section are those supplied by the manufacturer and therefore will be subject to conversion, shipping and import tax within the UK.
Leading Edge

The latest sheet from this manufacturer is offered in both 1/72nd and 1/48th scale and samples of each have made their way directly to us.

1/72nd Scale

• 72.21 RCAF Harvard Mk. IV 'The Goldblocks' Display based on 1945. The aircraft is RLM Yellow overall, with the engine cowling in Roundel Blue. The rudder is striped in blue and yellow, but the blue elements are supplied as decals.

• The instruction sheets offer good information on each machine, as well as general decal placement. However, either the instructions are satisfactory.

1/48th Scale

• 43. Fw 190A-8, 'Yellow 14', W/Nr. 584592. The aircraft is RLM Yellow overall, with the engine cowling in Roundel Blue. The rudder is striped in blue and yellow, but the blue elements are supplied as decals.

• The instruction sheets offer good information on each machine, as well as general decal placement. However, either the instructions are satisfactory.

KommanDeur

Three of the latest sheets from this manufacturer have been passed to us by their UK source: ARBA Products. Each of these sheets is limited to just 1,000 copies worldwide.

• 75/76 Bf 109G-10. The aircraft is RLM Yellow overall, with the engine cowling in Roundel Blue. The rudder is striped in blue and yellow, but the blue elements are supplied as decals.

• The deca sheet on this with this one includes all the extra numbers that allow you to model one of the seven machines. Each machine is RLM Yellow overall, with the engine cowling in Roundel Blue. The rudder is striped in blue and yellow, but the blue elements are supplied as decals.

• The instruction sheets offer good information on each machine, as well as general decal placement. However, either the instructions are satisfactory.

Decals

Information

Worldwide Enquiries: KommanDeur Désols, P.O. Box 4083, Deseckville, CA 92552-4083, USA.
Fax: 760 846 9531
UK Source: ARBA Products.

Scale Aviation Modeller International
Experts-Choice Decals

As many of you will know, this is the decal range produced by Bare Metal Foil Co. and the latest sheets have made their way to us directly from the manufacturer.

1/48th Scale
48-51 ANG Thunderjets in Korea 1951-1952.

This sheet offers markings for the following four machines:

- 1. Republic F-84E-15-RE, 49-2360 of 182nd FBS, 136th FBW, 5th AF based at Taegu AB (K-2), Korea in January 1952. This machine is natural metal overall with the engine intake in red, the dorsal spine and upper nose in Olive Drab and the dielectric panel on the top of the vertical fin in grey (approximately FS 36628). The aircraft also features red stripes on the tail, tailplanes and tip tanks (all supplied as decals).

48-52 Ohio and Iowa ANG F-84E Thunderjets

This sheet offers markings for the following four machines:

- 1. F-84E-10-RE, 49-2261 of the 162nd FIS, 178th FIW, OH ANG based at Springfield Municipal Airport, Ohio, 1956-7. This machine is natural metal overall with an Olive Drab anti-dazzle panel and dorsal spine and blue stripes and tip tank flashes (all supplied as decals).

- 3. F-84E-25-RE, 51-508 of the 112th FIS, 132nd FIG (1A ANG) based at Des Moines Airport, Iowa in 1956. This machine is in the same overall scheme as the previous option, although the ‘lightning strikes’ on the fuselage sides and tip tanks are black outlined red.

- 4. F-84E-30-RE, 51-638 of the 168th FIS, 121st FIG (OH ANG) based at Lockbourne AFB, Ohio in 1956-7. This machine is in the same scheme as option 1. Once again the two decals sheets in this

72-123 Empire Defenders Pt. II

- 1. Kawasaki Ki-45 Kai Type Tei of the 53rd Sentai, 3rd Hikotai based at Matsudo AB, Chiba Prefecture, Japan. This machine is with dark green spots over the overall Light Grey airframe.

- 3. Kawasaki Ki-45 Kai Type Tei of the 27th Sentai, 2nd Chutai based in the Philippines towards the end of 1944. This aircraft is Dark Brown overall.

- 4. Kawasaki Ki-45 Kai special version flown by the 4th Sentai by 2nd Lt. Misaburo Yamamoto and probably based at Otsuki AB, Yamagushi Prefecture in 1945. This machine is in the same scheme (less the red nose) as option 1.

- 3. Kawasaki Ki-45 Kai Type Tei of the 53rd Sentai, 3rd Hikotai based at Matsudo AB, Chiba Prefecture in February 1945. This machine is with Dark Olive overall.

The other decal sheet (with 2" badges) from 48-52

Set offer all the unique and national insignia for each option, plus two of those 2" squadron badges. In this case they are for the 162nd FIS and the 124th FIS.

The above two sheets retail for $11.95.

These sheets are to the highest quality and most comprehensive in their coverage of each subject. The manufacturer assures us of their accuracy and I like the inclusion of those 2" squadron badges, as I am sure all modellers will find a use for them. My only adverse comment is in regard to the instructions, which, although well illustrated etc do not actually list the decals per aircraft to any numbering system. The decals themselves are not marked either, so it results in your struggling to clarify what colours bands etc each option has.

Our thanks to Experts Choice (Bare Metal Foil Co.) for the review samples.

AeroMaster

The three options on 72-122

Directly from AeroMaster have come a selection of eight of their most recent decal sheets.

72-122 Empire Defenders Pt. I

1/72nd Scale

- 1. Kawasaki Ki-45 Kai Type Tei of the 53rd Sentai, 1st Chutai and flown by 1st Lt. Totoro Ito in November 1944 from Kiyosu AB, Aichi Prefecture, Japan. This machine is with dark green spots over the overall Light Grey airframe.

- 2. Kawasaki Ki-45 Kai Type Tei of the 53rd Sentai, 2nd Hikotai based at Matsudo AB, Chiba Prefecture, Japan. This machine is with dark green spots over the overall Light Grey airframe.

- 3. Kawasaki Ki-45 Kai Type Tei of the 27th Sentai, 2nd Chutai based in the Philippines towards the end of 1944. This aircraft is with dark green spots over the overall Light Grey airframe.

- 4. Kawasaki Ki-45 Kai special version flown by the 4th Sentai by 2nd Lt. Misaburo Yamamoto and probably based at Otsuki AB, Yamagushi Prefecture in 1945. This machine is in the same scheme (less the red nose) as option 1.

- 3. Kawasaki Ki-45 Kai Type Tei of the 53rd Sentai, 3rd Hikotai based at Matsudo AB, Chiba Prefecture in February 1945. This machine is with Dark Olive overall.

The decal sheet from 72-123

Chiba Prefecture in February 1945. This machine is with Dark Olive overall.
The four options on 72-129

The decal sheet from 48-141

1. B-26B-25-MA, 41-31773, 'Flak Bait' of the 32nd BS. This machine survived more missions (200) than any other American warplane and is Olive Drab over Neutral Grey, although all of the paintwork is extremely worn.

2. B-26C-15-MA, 41-34955, 'Mission Belle' of the 455th BS, 323 BG. This machine is Olive Drab over Neutral Grey with a white band around the vertical fin.

The two options offered on 48-141

48-141 Murderous Marauders PL1

1. B-17G-25-BO, 42-31678, 'Little Patches' of the 91st BG, 401st BS, 8th AF based at Basingbourne, UK. This machine is Olive Drab over Neutral Grey with the wing and tailplane tips, plus vertical fin panel in red.

The decal sheet from 48-144

The two options offered on 48-144

48-145 Fortresses in the Sky PL1

1. B-17G-45-BO, 42-38083, 'Man O War II' of the 91st BG, 322nd BS also based at Basingbourne in early 1944. This machine is in the same scheme as the previous option.

The decal sheet from 48-413

48-413 Murderous Marauders PL2

1. B-26B-25-MA, 41-107534, 'Belle Ranger' of the 320th BG. This machine is Olive Drab over Neutral Grey with red engine cowling rings and propeller hub tips.

2. B-26B-55-MA, 42-96919, 'Mil Run Special' of the 390th BG, 598th BS based at Steeple Morden. This machine is natural metal overall with an Olive Drab anti-dazzle panel and 32" wide invasion stripes around the rear fuselage. The fuselage codes and star and bar are painted on an Olive Drab panel that is placed over the invasion stripes.
**Third Group**

Samples of the latest seven sheets from this manufacturer have been passed to us by their UK distributor, The Aviation Hobby Shop.

1/48th Scale

48-035 Grumman TBF/TBM Avenger D-Day Stripes

As the title suggests this sheet offers one complete set of invasion stripes suitable for the Grumman Avenger. This sheet also includes separate white backgrounds to go under the fuselage roundels.

48-041 Lockheed P-38 Lightning #1 - F-5A/B/G

Two of the options from 48-041

This sheet offers the following four schemes:

1. F-5B-1, 42-68223 of GR II/33 and flown by Cdt. Antoine de Saint-Exupery in July 1944. This machine is bare metal overall with the upper nose and inboard engine nacelles in Olive Drab.
2. E-56-6, 44-25826 of GR II/33 and flown by an unknown pilot in late 1944. This aircraft is in the same scheme as the previous option, but the Olive Drab panels on the engines extend right back along the top of the tail booms.
3. E-5B-1 of GR II/33 in March 1945. This machine is once again in the same scheme as the previous two options, but the Olive Drab areas extend up to the tops of the vertical fins and the nose cap and spinners are red.
4. F-5A-1 flown by Cdt. Antoine de Saint-Exupery. This machine may be in either Olive Green and Medium Brown over Light green scheme, or Dark Green (RAF) and Dark Earth (RAF) over Sky, as sources conflict a bit on this one!

The decal sheet includes all the unique and national markings for each option along with a set of rudder tricolours and stencil blocks for each option.

48-042 Messerschmitt Bf 109 #11

This sheet offers schemes for the following four machines:


Michael Sonner, Gruppe Technical Officer, I/JG51, Russia 1941. This machine is white distemper applied over the original RLM 74/75/76 scheme and the spinner, lower engine cowling, wing tips and fuselage band are yellow (RLM 04).
2. Bf 109F-2, Black 1, W/Nr. unknown flown by Lt. Hitzig Schuman, 2nd Staffel, JG51, Russia, August 1941. This aircraft is RLM 74/75 over 76 with a mottle of RLM 02/70/71 on the fuselage and vertical fin. The yellow rudder and fuselage bands have been oversprayed with RLM 74/75.
3. Bf 109G-6, W/Nr. unknown flown by Lt. Günter Josten, 1st Staffel JG51 in the Spring of 1944. This machine is RLM 74/75 over 76 with the spinner, lower engine cowling, wing tips and fuselage band in yellow.
4. Bf 109G-6, W/Nr. and pilot unknown operated by the 2nd Staffel of JG51 in Russia in the Spring of 1944. This machine is white distemper over RLM 76 with the spinner, lower engine cowling, wing tips, fuselage band and rudder in RLM 04.

The decal sheet includes all the markings required to make up each option plus stencilling.

48-043 Messerschmitt Bf 109 #12 IL/JG51

1. Bf 109E-3, White 2 flown by Obw. von Hans Illner. This aircraft is RLM 71/02 over 65 with an RLM 02/70/74 mottle.
2. Bf 109E-3, White 1 flown by Josef Földi. This machine is RLM 71/02 over 65 with a mottle of RLM 70 on the spine and RLM 70/71 on the vertical fin. The rudder is a replacement and is RLM 70 over 65.
3. Bf 109E-3, Black 1 flown by Hptm. Horst Jäckel. This machine is RLM 71/02 over 65 with an RLM 02/70/74 mottle.
4. Bf 109E-3, Yellow 1 flown by Oblt. Josef Priller the 6th Staffelkapitän. This aircraft is RLM 71/02 over 65 with a mottle of RLM 02/70/74.

Once again the decal sheet includes all the unique and national markings for each option, plus one complete set of stencils.

48-044 Focke Wulf FW 190 #9

Survivors #1 (A-B)

This sheet deals with Fw 190s found at the end of WWII and offers markings for the
All four options from 48-044
following four machines:

1. Fw 190A-8, 'Red (or green) 13' found at Grove, Denmark in June 1945. This machine is RLM 75 (or 83) over 76.
2. Fw 190A-8, 'Blue (or Black) 5' found at Lint, Austria in June 1945. This aircraft is RLM 81/82/83 over 76 with the wings in RLM 81/82 over 76 and the spinner in RLM 70.
3. Fw 190A-8, 'Yellow 17' found at Bad Aibling, Germany in June 1945. This aircraft is RLM 75/81/83 over 76 with the wings and tail in RLM 82/83 over 76. The lower engine cowling is red and the spinner is white spiralled black.
4. Fw 190A-8, 'Red 3' found at Bad Aibling, Germany in June 1945. This machine is RLM 74/75/76/81/82/83 (anywhere anyone).

Once again the decal sheet includes all markings required to make up each option plus three complete sets of stencils (although some are not fitted to certain options, but all options are noted on the instructions).

48-045 Focke Wolf Fw 190 A-8 - Survivors 2# (A-2/F-7/A)

The decal sheet from 48-045

This sheet is the second one dealing with Fw 190s found at the end of WWII and offers markings for the following four machines;

1. Fw 190F-8 flown by Fw. Eugen Lörcher of IlS/62. This machine is either RLM 77 or bare metal with a light mottle of RLM 83 on the forward fuselage, RLM 83 with an RLM 81 mottle on the rudder and a combination of other colours on other areas of the airframe resulting in an aircraft that looks as if it is made of spare parts!
2. Fw 190F-3 flown by Fw. Josef "Scpp" Enzenberger of II/SG10. This machine is RLM 74/75 over 76 with RLM 83 roughly applied over the fuselage. The lower engine cowling and the rear fuselage band are yellow, although the latter item has been partially overpainted.
3. Fw 190-3/F, W/Nr. 2168 found in Germany in the Summer of 1945. This aircraft is RLM 81/75 over 76 with the upper cowling in RLM 75 and the tail and rear fuselage (a replacement?) in RLM 77 (with a mottle of RLM 81.
4. Fw 190E-8, W/Nr. 582384, Germany, Summer 1945. This aircraft is RLM 74/75/81 over 76 with patches of RLM 81 and 82 on the fuselage and vertical fin.

As usual, the decal sheet includes all the markings required to make each option plus three complete sets of stencilling.

48-046 Focke Wolf Fw 190 A #10, JG 24 & JV44 (B-9/9-11)
The decal sheet from 48-046

This sheet offers markings for the following four machines;

1. Fw 190D-9, W/Nr. 210194, flown by Flg. Werner Hohenburg of Stab/JG2. This machine is RLM 75/81 over 76 with an RLM 81/82/83 mottle and either RLM 75/81 or 82/3 on the wings.
2. Fw 190D-9, W/Nr. 600424 flown by Hptm. Waldemar Wkkbe, JV44 Wargers-Staffel. This aircraft is RLM 82/83 over 76 with dense mottle. The lower wings and fuselage are red with white stripes, as this machine was part of the protection flight for the Me 262s of JV44.
3. Fw 190D-11, W/Nr. 22004. Stab General der Jagdflieger. This machine is RLM 81/82 over 76 with heavy mottle of RLM 83 on the fuselage and tail.
4. Fw 190D-11, W/Nr. 604144 of JG2 (possibly). This machine is RLM 81 over 76 with fuselage mottle of RLM 81/82.

The decal sheet contains all the markings for each option along with most of the required stencils.

This is another good selection of subjects from Third Group. With the latter three sheets however, I would suggest double-checking the reference sources listed on the instructions, as the manufacturers cannot show the extent of overspray and mottle effect correctly, and late-war Luftwaffe colour schemes are notoriously complex.

Each of the sheets reviewed here can be obtained from The Aviation Hobby Shop for £4.95 and our thanks go to TAHS for the review samples.
A Tiger’s Tale

The CraftWorks P-40

by Paul Lawson

Until recently there were no kits in this increasingly popular scale of the early P-40; modellers were obliged to convert the elderly Revell P-40E, a major undertaking. However, in the past year, two options have become available; a resin conversion set from Scratchbuilt (described in SAMI Vol 4 Issue 10), or the subject of this article; a complete mixed-media kit from newcomers CraftWorks. Although the kit was the subject of a special preview in SAMI (Vol 4 Issue 6), a brief overview may be helpful here.

Presentation of the kit is first class. A strong, full-colour box features an excellent painting by Stan Stokes - ‘Tiger Claws’ which is of an AVG P-40 in action. The majority of the kit is cast in cream coloured resin, and features some superb detail, especially the rivets, panel lines, access covers and so on on the exterior surfaces. Despite careful packaging with bubble wrap, both wing tips were chipped on my sample, and were a terrible job to repair, taking several attempts to get right using superglue and accelerator. White metal is used for a multitude of smaller parts, including the undercarriage, prop blades and some of the cockpit details. While an etched fret supplies the pilot’s seat, cockpit armrest, instrument panel (with acetate backing for the instrument faces), detail parts for the undercarriage doors, machine-gun jackets and all the canopy framing as well as a number of smaller detail parts. Two vac-formed canopies are supplied, one as a spare, as well as a resin ‘form’ to be used to cut the canopy to shape. Another bag contains assorted lengths of plastic strip and rod, some coloured plastic stock for the navigation lights, wire, some dry decals for placards, some metal foil, a rubber mat for rolling the etched gun barrel jackets, lengths of aluminium tubing and a piece of clear plastic for the windscreen armoured glass.

Two sheets of Microscale decals are supplied, giving markings for any of four AVG machines, one of the ‘Pearl Harbour Defenders’, or a Tomahawk of No. 112 Sqn, RAE. It simply had to be a ‘Flying Tiger’ for me!

Finally, a comprehensive instruction book covers construction in detail, using a good written text, drawings and photographs, although reproduction of the latter is poor. A brief history of the type is given, as well as general notes about working with the materials found in the kit.

In short, CraftWorks have set out to provide a kit where nothing needs to be added; Have they succeeded? Read on...

General Construction

As with any mixed-media kit, cyanoacrylic (superglue) is the adhesive of choice. Although epoxy adhesive could be used where particular strength is needed, the undercarriage being a case in point. I tend to use three different viscosities of superglue, according to the circumstances, applied with the end of a small safety pin or a cocktail stick.

I annealed the etched fret before use over a gas flame as there was to be a fair bit of bending of parts but, be warned, the fret is very thin gauge brass, and the parts distort instantly

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I annealed the etched fret before use over a gas flame as there was to be a fair bit of bending of parts but, be warned, the fret is very thin gauge brass, and the parts distort instantly
The massive main components comprise the single-piece wing unit, with excellent wheel well interiors and the fuselage, which is hollow cast to allow you to add all the interior detail

if they get too hot! I also primed the entire feet with Halfords acrylic grey primer before use.

Any mixed-media kit of this complexity is going to demand a lot from the modeller, and this especially applies to parts fit; test-fitting, dry runs, trimming, filling and sanding are the order of the day.

The Nose

Well, it makes a change from starting with the cockpit, doesn’t it? First off is the radiator/duct/cooling flaps assembly, all cast

list the drill bit sizes needed, in both Imperial and Metric sizes.

The white metal propeller blades are keyed to their locations on the resin spinner, and are thus assembled easily and accurately. The upper cowl now has its machine-gun barrels added, but I deviated from the instructions here and left the white metal exhausts until much later, their slots in the cowling sides were backed with plastic card, and their mounting plates shortened slightly to enable their fitment from the outside, rather than inside as intended.

The drilling parts can now be brought together and, after a little trimming, I was able to get a good fit. The propeller assembly was painted separately and added at the end of the project.

The Office

Now this was the bit I’d really been looking forward to! The supplied detail here is absolutely stunning, and as cockpits are my “thing”, I couldn’t wait to get started!

We start off by adding the etched pilot’s armour to the one-piece upper/rear fuselage, before moving on to the cockpit itself. Resin sidewalls provide the basis, and include excellent, crisp, cast detail. The parts are too thick as cast, however, and need to have their backs sanded to get a good fit to the cockpit sides. I don’t think I sanded mine enough though, as they are still a little proud. To these

in resin, which are assembled into the lower cowl casting, I hit a problem straight away here, as the duct casting was a poor fit to the lower cowl, needing a lot of trimming and filing to get a neat result. I pre-painted the Prototype radiators, referring to the Squadron/Signal P-40 Walk Around book, and painted the intake section of the lower cowl in grey I would be using for the undersurface colour.

The rear of the spinner is drilled out now, ready to accept the supplied metal prop shaft: in fact, while I had the drill out I went through and drilled out all the various holes called out in the instructions. Crafting very helpfully

The completed nose assembly: note plastic-card backing for exhausts

First stage, the nose assemblies. Note the filler needed to blend ducts into the lower cowl, and scratch-built cowling flap operating linkages, soon to be removed...

They rest of the pieces in this kit are also in resin. Here you can see the upper cowling, spinner, lower cowling and radiator unit, rudder, elevator and ailerons, cockpit floor, wheels, flaps and the drop tank

These are all the other bits and pieces included in the kit. The plastic pins are used to make the navigation and formation lights. Also visible are the cockpit placards which are subdued on rubber copies (made by Archer Fire Transfers). The rubber mat is to roll the etched gun barrels on and the metal stud is to mount the propeller to. Also included are plastic stock, the clear side windows and metal tubing for the gun barrels

The rest is the etched brass fret. Note the canopy framing and the pilot’s seat

Two large decal sheets are included with this kit. This allows you to make four AVG machines, a P-40 of the 78th Pursuit Sqn., 18th Pursuit Group, based at Pearl Harbour in December 1941, a Tomahawk of No.113 Sqn., RAF, based in North Africa in September 1941. The quality of these decals is excellent with perfect register, colour density and a minimum of carrier film.

The Cowling parts can now be brought together and, after a little trimming, I was able to get a good fit. The propeller assembly was painted separately and added at the end of the project.

Assembled cockpit components, assembled and ready for painting

Closer look at the lovely sidewalls and instrument panel. My additions are obvious
interiors in their standard interior green, which was more of a bronze green than the standard US Interior Green. Accordingly, I used Humbrol 75, lightened with a touch of yellow, as my interpretation of this colour. I must stress that this is pure speculation on my part, and if any readers have the definitive answer then please get in touch, via the Editorial address!

I applied a coat of Halfords grey primer to the cockpit parts, then sprayed on my 'Curtiss' mix. I intended to weather the model heavily, in keeping with contemporary photos, so this had to include the cockpit. To this end, I applied a wash of ground black and brown pastel, dissolved in water, removing the excess then the complex instrument panel/rudder pedals/gun assembly is inserted through the front of the fuselage. This was very tricky, not helped by some warpage in the resin fuselage, which made the fit extremely tight! However, wedging the sides of the forward fuselage apart temporarily helped and after numerous dry runs it was all where it was meant to be...

A Tiger Takes Shape
I had earlier noticed that the one-piece resin wing had been cast with insufficient dihedral, and that the fin and rear upper fuselage were warped out of true. However, I did decide to try and correct these areas once the main airframe was together, so that I could true everything up at the same time.

Accordingly, after some trimming and lots of dry runs, the wings, main fuselage section and lower fuselage section were now brought together. I also added the completed nose section from the first stage, and found that my carefully constructed cowl-flap linkages freed the joint! Ah well, at least I tried. A simplified version was added later... CraftWork would have you adding little flaps to the forward wing roots at this stage, to fill a gap due,
presumably, to moulding limitations. They suggest using spare etched brass, but I found I could get a neat job with Milliput. The fit of these major components was none too good, and I spent a good deal of time filling and sanding at this stage. Milliput was used where extensive work was necessary, notably around the lower tail and the nose-to-fuselage joints, Revell Plasto and Tipex sufficient for the rest.

In view of the work required at this stage, I applied a coat of primer after the initial filling and sanding, remedied the remaining defects, then described the detail lost through sanding before priming again.

So, what about the warped bits? Ah, the warped bits. Bear in mind that the one piece wing is a very substantial lump of resin; dipping it in hot water simply produced curly wing tips (I kid you not), as well as separating my lovingly crafted repairs (again). The latter was then brought to bear, again with little effect, although I think I might have improved the dihedral by a degree or so... A reviewer in another magazine achieved his improved dihedral with a hot air paint stripper, but for me, discretion was certainly the better part of valour, and I left it at that. Worse was to come, however. In my efforts to straighten the fin/rear fuselage, again using the recommended hot water method, the entire assembly exploded into its component parts, pieces of superdetailed cockpit being thrown over the kitchen! I'm told the screams could be heard several streets away! Miraculously, nothing was lost or seriously damaged, and having straightened the fin I glued it all back together again. The tailplanes and (separate) control surfaces could now be added. The latter fitted tightly through the rear fuselage and inserted a short length of plastic tubing, fitted to matching holes in the elevators, rather than using two shorter lengths of aluminium tube as suggested in the instructions.

Following the kit's construction sequence, and having completed all filling, sanding and re-scribing, it was now time to paint.

**The Tiger's Stripes**

AVG colours have been the subject of discussion and controversy among aviation historians and modellers for many years. However, I had to hand what may well be the final word on the subject, namely Aeroduster's superb decal set American Volunteer Group. The First American Aces (1942-47). Although the decals themselves were obviously unsuited to this project, the pack contains a scholarly review of the research into AVG colours, written by Terrill J. Clements, and including a comprehensive list of sources to back his conclusions. Colour side views and two pages of contemporary colour photos of AVG aircraft make this a 'one-stop' reference, and I had no hesitation in using this set as my main reference for colours and markings.

By contrast, CraftWorks' colours and markings diagrams are the weakest part of their instructions, with indifferent drawings and little information on accurate decal placement.

Essentially, Curtiss used DuPont paint, mixed as closely as possible to the RAF standards; thus the DuPont Dark Earth is virtually identical to the RAF shade, while their Dark Green is a rather different, darker shade. The underside should have been Sky, but it appear that at some point this was taken to mean Sky Grey, hence the grey undersides on these aircraft. The colours I used were Dark Earth (Xtracolor X2), Dark Green (Xtracolor X14) and Dark Grey (Xtracolor X22) on the upper surfaces and Aircraft Green (Xtracolor X136) on the undersurfaces, all matched to the AeroMaster reference material.

A coat of Halfords Nissan Silver was applied to the wing root areas for later weathering, then the top colours applied. The original DuPont Dark Earth shade weathered badly, ending up as a sort of 'Sandy Earth'. To this end, I lightened the Xtracolor shade with some white before spraying the entire upper surfaces and spinner. Once dry, the upper surfaces were masked up for the camouflage pattern to be completed with the Dark Green.
Squadron AVG, before I applied the main colours, to make masking nice and easy, but, well, I forgot! I had a nice tricky masking job afterwards, though, using Humbrol 153 as a good match for the AVG red.

Markings

I'd chosen aircraft #68, flown by Charles Older, as the subject for my model, not least because I had good colour photos of it, and it carried all the most colourful AVG markings!

CraftWorks' decal sheet is beautifully printed, with all the images in perfect register and good colour density. However, there are some errors in the AVG markings. First, the distinctive 'sharkmouth', every aircraft's design was different, thus the decal sheet really has to offer four different AVG sharkmouths, plus one for the RAF 112 Sqn machine. What you get, however, is two, one for the AVG and one for the RAF. I had to choose the design which seemed closest to my references for #68, but it's far from a perfect match. In the same area, the 'eyes' should have red 'pupils' not black as supplied, although over-painting them is straightforward enough. Next, most AVG pilots had their name painted on their aircraft, just forward of the windshield on the port side. Older being no exception, but this image is not on the kit sheet, leaving the modeller to make up their own, as I did.

The Disney-supplied 'Flying Tiger' images are well reproduced, but should have pale blue, not white, wings; again, over-painting sorts this out. As an aside, there were decals on the real aircraft, and, once applied, brushed over with a glossy varnish to seal them to the surface, thus darkening the surrounding paint, I represented this effect by brushing a coat or two of Tamiya Smoke over the images on the model. At the time aircraft #68 was photographed in the AeroMaster reference, Older had ten 'kills' painted on his aircraft, but the kit sheet supplies just four, I'll add some more to my model just as soon as I can find some... No stencils are supplied, and indeed it seems by applying Verlinden rub-down decals onto pre-painted decal sheet. Finally, on a nit-picking level, #68's serial, F-8109, doesn't actually appear as such on the sheet, and I had to make it up by cutting up the serials that were supplied.

A Shabby Tiger

The AVG were at the end of a long, tenuous supply line, and were in almost continuous use in all weathers. This is reflected in their highly weathered appearance in contemporary photos, and I attempted to reproduce this on the model. The 'faded' Dark Earth I'd sprayed on looked rather too pale in the cold light of day, so I over-sprayed the entire upper-surfaces with Tamiya Smoke in a fairly random pattern. This had the double benefit of darkening the colours and producing a randomly weathered appearance. I'd intended to use Sellotape to rip off selected areas of the wing root paint, thus revealing the gloss Silver underneath, but the over-spray of Tamiya Smoke made this impossible, it's tough stuff and would not be lifted by the tape! I resorted to gently sanding back to the 'metal', which also produced a nice worn effect to the surrounding paintwork.

Numerous small scratches and chips were applied with an artist's silver pencil, then a heavy pastel wash applied over the entire model, worked well into all the surface detail, and the excess rubbed off when dry. Next, exhaust and conical stains were applied, using Xtracolor 'Exhaust', and oil and fuel stains were simulated, using thinned gloss black paint.

The spinner was sprayed in two shades of Dark Earth, the rear half appearing darker in photos due to oil staining from the pitch change mechanism.

Finally, brown powdered pastel was brushed onto the wing roots.

This completed the paint job, now for the really tricky stuff!

Tiger Feet

The white metal undercarriage parts make up into convincing replicas, and look very good indeed once the supplied data plates and brake hoses are installed. The mounting holes for the main legs are really not up to the job though, and I reinforced them with plastic tubing.
The main wheels are unweighted, which I found rather surprising given the attention to detail elsewhere in the kit. However, I simply filled 'flats' on each wheel. Wheel-well detail is supplied as superbly detailed resin inserts, and I enhanced these further with some plumbing made up from lengths of wire. You could of course cover all this detail with a representation of the canvas covers often fitted to the wheel wells, but what a waste of detail! I did follow this route for the tailwheel well though, sculpting some Milliput around the base of the tailwheel leg.

**Bend Me, Shape Me**

Ah yes, the canopy. Following the instructions to the letter, I carefully cut out the windscreen and hood over the resin form. This would have been a lot easier if thinner clear material had been used, as it was the thick plastic was difficult to cut accurately, even using the resin form.

A dry run showed that the hood was fine, but the windscreen was not going to fit - never mind, use the spare! Once again, not a good fit, much trimming and filling of gaps later, the windscreen finally succumbed, but the fit is not very neat at all. I can't say for sure what the problem was here, but I rather suspect it was the resin form. The etched-brass frame for the hood went on a treat, I used the tiniest drops of thin superglue to secure it in place, working slowly and carefully to get everything lined up properly. The windscreen parts were much trickier, as it is an altogether more complex assembly, and needed trimming and constant adjustment as I struggled with the fit of the windscreen to the fuselage. By the time I'd finished, I'd abandoned my plan to install the optional armoured glass panel...

Externally, my references showed two framing strips at the front of the windscreen, although these are not mentioned in the instructions. Mine were simply added from plastic strip. The two rear glazings were another problem area; they are pre-cut and the idea is to 'pop' them into grooves cast around the peripheries of the glazed areas, but the grooves are simply too shallow for this to work. I discovered this after painting, and rather than risk the paintwork by trying to deepen the grooves, I trimmed the clear parts to size and secured them with thin superglue, again not a very neat result. Now the wing guns were a different story! Rolling the etched jackets on the mat supplied with a drill bit worked exactly as advertised, and once the gun barrels were installed looked great!

Coloured plastic 'jigs' are provided for the modeller to fashion into navigation lights; I just couldn't get the hang of these, and ended up adapting some items from the spares box, tinting them with Tamiya clear colours.

**Wired For Sound?**

Er, well no, actually! Another AVF enigma here, I fear! Not one of the many photos I scrutinised showed the characteristic aerial array found on most early P-40s. All I could see were two small white objects (insulators?) on the fuselage spine, which I fashioned from plastic strip on the model. Now the AVG aircraft were supplied minus radios, and had civilian sets fitted on arrival in China; also one of the radioamen, in his memoirs, recalls stripping out redundant radio wiring from inside the tail of the aircraft as one of his first jobs in the AVG, so I wonder if these aircraft had no external aerials? Again, any information would be appreciated.

**Conclusions**

Gosh, what a long article! Well, you were promised a full, in-depth build article! I think my overall impression here is of a very ambitious debut by CraftWorks. The kit is truly comprehensive, and needs very little extra from the modeller's own resources, which is unusual for such a specialist kit. Perhaps some areas are a little too ambitious, though, the method of installing the rear glazings being typical of this. The engineering of the kit leaves a little to be desired in some areas, notably the inadequate main undercarriage location.

Some areas of the instructions were rather poor, especially the colours and markings information; the decals, although of excellent quality, really should have been better researched, given the amount of contemporary material available. Where the kit really scores is in the stunning levels of detail supplied, the cockpit especially being in a class of its own. The finished model is surprisingly large, and has that lovely weighty feel unique to resin kits.

I really don't see any point in discussing the price here; if you want an early P-40, it's either this complete kit, or the Scratchbuilders conversion, which will be nearly as much work, plus you'll probably want to scratchbuild much of the cockpit to bring it up to the same standard. Neither way is going to be cheap, whether in time or money! To sum up then, very good first effort, CraftWorks, and I look forward to seeing your next release!

**Paul Lawson**

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**References**

- American Volunteer Group. The First American Aces. (Aeroplane Decals SP 48-07) - probably all you need for colours and markings.
- Walk Around P-40 Warhawk. Squadron/Signal Publications No.5 - a good general reference, but concentrates mainly on the later P-40E, which differs in many ways from the P-40C.
- Curtiss P-40 Model - probably the best value reference around, covers all versions, with excellent scale drawings and includes cockpit shots and colour artwork of the P-40C. Lots of colour side views, as well, although one or two are a bit suspect, as noted by the publisher.
- Flying Tigers, by Daniel Ford - superb, detailed history of the AVG, not many photos but a really good read.
- The Maverick War, by Dure Schulte - another good history, with some useful photos.
- With Chenault in China, by Robert M. Smith - memoirs of an AVG radioam: riveting stuff, and some superb photos.
- Flying Tigers by Ron Heiferman - a bit of a potted history, a few useful photos and some dodgy drawings.
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1: Fw190A-4 WNr. 5304, Oberleutnant Johannes Sellert, Kommandeur. JG26, May 1942
2: Fw190A-4, Oberleutnant Hannes Trautloft, Kommodore JG54, Dec 1942
3: Fw190A-4, Major Horst von Bonin, JG54, June 1943
4: Fw190A-6, General-Major Adolf Galland, General der Jagdflieger, Berlin, March 1944
5: Fw190A-8, Oberleutnant Kurt Buhligen, Kommodore JG2, Nidda, September 1944

Butcher Birds Pt. VIII (Fw 190 A’s)
1: Fw190A-6 WNr. 530106, Oberfeldwebel Hans Glöthken, JG26, Husum, August 1943
2: Fw190A-2 WNr. 25207, Fw. Adolf Glunz, Staffelkapitän JG26, Abbeville, June 1942
3: Fw190A-8, Oblt. Joseph Priller, Belgium June 1944
4: Fw190A-5, Oberleutnant Walter Oesau, Kommodore JG2, France, Feb 1943
5: Fw190A-5, Leutnant Emíli ‘Bully’ Lang, JG54, Russia, May 1943

Butcher Birds Pt. IX (Typhoon Mk. Ia)
1: Mk.IB No.183 Sqn, Exercise ‘Spartan’, Mar 1943
2: Mk.IB No.197 Sqn, 1943
3: Mk.IB No.181 Sqn, Exercise ‘Spartan’, Mar 1943
4: Mk.IB (A conversion) X Flight No.609 Sqn, RAF Manston, April 1943
5: Mk.IB No.461 Sqn, Idku, Egypt, 1943
6: Mk.IB No.181 Sqn, April 1943
7: NF Mk.IB RAE, Nov 1942/March 1943

Storms in the Sky Pt. X (Typhoon Mk. IB)
1: Mk.IB No.183 Sqn, Exercise ‘Spartan’, Mar 1943
2: Mk.IB No.197 Sqn, 1943
3: Mk.IB No.181 Sqn, Exercise ‘Spartan’, Mar 1943
4: Mk.IB (A conversion) X Flight No.609 Sqn, RAF Manston, April 1943
5: Mk.IB No.461 Sqn, Idku, Egypt, 1943
6: Mk.IB No.181 Sqn, April 1943
7: NF Mk.IB RAE, Nov 1942/March 1943

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"This is a long overdue letter to extend to all Aeromaster my compliments, not only for the exemplary product lines offered but also for the service provided. Scale modeling has come a long way in 35 years. Kits today are generally of high quality compared to those of years gone by. Nevertheless, I fall into that category of modelers who strive to achieve as accurate and detailed a miniature as possible. Thanks to the finely crafted aftermarket decals, resin detail sets and quality paints available from Aeromaster it is possible to achieve these results without having to resort to time-consuming scratch building. I also appreciate the fact that well researched decals provide the modeler with the opportunity to build not only more colorful, but also historically significant miniature replicas. Keep up the excellent work.
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Featured this month is a 1/48th scale P51-D Mustang 'Dusty Butt', built using selected colours from the Warbird Acrylic Colors range and the Aeromaster decal set (48-091).

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of suitable performance. If the Italian aircraft industry was to produce anything like the Spitfire and Messerschmitt Bf 109, it had no option but to turn its attention beyond its shores for the necessary power around which to build such projects.

On the personal initiative of Ing. Alberto Longhi, head of Reggiane’s Technical Office, the excellent Daimler-Benz DB.601 A arrived in Italy, first through the supply of a number of examples, and later through its licence-production. The Italian version officially matched the original’s 1,175hp at sea level running at 2,300rpm, and 1,040hp at 4,100m. In practice, it seems that some did not perform so well, while there were the odd ones which bettered specified rates by some 10-12%.

The major aeronautical firms tried to beat each other to produce the best fighter around this engine. These included the Fiat G.50V, Caproni Vizzola F4, E5 and F6M, Reggiane Re.2001 Falco II and Macchi C.202. Of these, only the last two were to see eventual series production and service. Both Reggiane and Macchi worked on separate, though parallel lines, as they progressed from earlier well proven designs, the Re.2000 for the former and C.200 for the latter. Macchi, however, had produced an interim development in the form of the C.201. Originally this aircraft was designed to take the Fiat A.76 RC.40 liquid-cooled engine which should have produced 1,000hp, a sleek engine which would have allowed better streamlining of the fuselage. Only two examples were built (MM.436, MM.437) which were eventually fitted with the standard A.74 radial as the RC.40 failed to materialise. They did, however, reintroduce an enclosed cockpit and a cut-down profile, as on the original C.200.

**The Folgore Described**

A pure fighter aircraft, the C.202 was of all-metal construction, powered by an Alfa Romeo RA.1000 RC.41/1 ‘Monsone’ twelve-cylinder inverted Vee liquid-cooled engine driving a Piaggio P.1001 three-bladed metal variable-pitch propeller of 3.05m diameter. Fuel was housed in a main 270l tank in the forward fuselage, positioned between the engine firewall and cockpit, two 40lt tanks in the wing centre section and another 80lt tank placed behind the pilot’s seat.

The wings were divided into two outer detachable sections and a mid section, the latter being integral with the fuselage. They were built around two main spars and were identical to those of the C.200. Developed by Ingenier Sergio Stefanutti, they featured a port wing of slightly greater area than starboard so as to compensate for engine torque (see accompanying scale plans). The wing centre-section incorporated wells for the fully retractable main undercarriage and the water radiator for the engine’s cooling system.

The centre fuselage housed the pilot’s cockpit which was enclosed by a two-piece canopy, a fixed windscreen with an armoured glass front section, and a hinged framed cover which opened to starboard. Pilots found the cockpit quite comfortable and well laid-out. A San Giorgio Type B reflective gunsight was fitted above the main instrument panel; most switches and levers were fitted to the left of the pilot so as to free his right hand to handle the stick-style control column which incorporated the gun-firing button at its top. Communication was through a highly reliable Allobocchi B.35 radio set while 44kg of armour plating was provided for the pilot’s rear defence.

As from Serie III, the compressor air intake on the port side of the engine cowling was fitted with the characteristic ribbed sand filter, and a A.S. suffix (Africa Settentrionale – North Africa) was added (incidentally, the 15 Series of the C.202 Folgore do not denote variants, but *Matricola Militare* – military serial – batches, though small improvements were at times implemented when a new *Serie* was introduced). Armament consisted of a pair of Breda-SAFAT MC.12.7 (12.7mm) machine guns positioned above the main fuselage fuel tank, firing through the propeller arc, with 400 rounds per gun (rpm). An additional pair of Breda-SAFAT MC.7.7 (7.7mm) guns with 500 rpm were added to the wings as from Serie VI, though these were not always fitted as it saved some 140kg. Underwing racks for a maximum of 160kg of bombs or 150lt of external fuel tanks were added as from Serie IX, together with the designation C.202AS/CB (Giacia-Bombardiere – fighter bomber); few photos of Folgore with tanks can be found while I can’t recall seeing a single picture of a C.202 with bombs attached.

MM.91974 was the sole C.202EC (Esperimento Cannone – experimental cannon), an attempt to beef up the Folgore’s armament by installing a pair of 20mm Mauer MG-151/20 cannon in underwing pods. This was not developed further as the cannon wing installation was eventually introduced on the superlatest Macchi C.205 Velo (SAMI Vol/I, November 1995). Another ‘one-off’ was MM.7768 which had a chin radiator in place of the one under the fuselage centre-section, but this resulted in very high drag and the experiment was abandoned. The C.202 could be fitted with an FM-62 gun-camera, while at least two examples (MM.9425, MM.9438) were fitted as photo-reconnaissance machines.
Macchi C.202

Macchi C.202 Serie I Folgore, of the 88a Squadriglia, 17° Gruppo, 1° Stormo at Campobasso in October 1941. Note early-style air intake without sand filter.

Macchi C.202 Folgore Serie I, 97a Squadriglia, 9° Gruppo, 4° Stormo based in Sicily during 1941. Note lack of aerial mast.

Macchi C.202 Folgore Series XII, MM.91815, 84-12 of the 84a Squadriglia, 10° Gruppo, Catania (Sicily), July 1943.

Macchi C.202 Folgore, flown by the Commandante of the 79a Squadriglia, 6° Gruppo, 1° Stormo, Libya, January 1942.

Macchi C.202 Folgore, flown by the Commanding Officer of 151a Squadriglia, 20° Gruppo, 51° Stormo CT, based at Sardegna in 1942's.

Scale: 1/48

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Macchi C.202 Folgore, operated by the 369a Squadriglia, 52° Stormo, based at Capodicchino in July 1943.

Macchi C.202 Folgore of the 74a Squadriglia, 23° Gruppo, 3° Stormo which during October 1942 was operating from Abu Nimeir, Egypt. Camouflage around the unit number has been touched up, probably covering up a previous identity. Note white wingtips, above and below.

Macchi C.202 Folgore Serie IX, MM.9647 of the 75a Squadriglia, 23° Gruppo, 3° Stormo, Tunisia, March 1943. Note white wingtips, above and below.

Macchi C.202 Folgore of the 372a Squadriglia 'Asso di Bastoni', 153° Gruppo operating from Palermo (Sicily) in November 1942. Note the different pattern on the engine cowling, which must have come from a different machine.

Macchi C.202 Folgore, flown by the Commanding Officer of the 153° Gruppo Autonomo, operating in Libya in 1!41. Note Commandante di Gruppo pennant (carried on both fuselage sides) and Roman Numerals for the Gruppo number.

Scale: 1/48
© Richard J. Caruana – 1999
**Macchi C.202**

Macchi C.202 Folgore of the 382a Squadriglia, 21° Gruppo Autonomo, Voroschilovgrad (Russia), September 1942

Macchi C.202 Folgore, of the 8° Gruppo, Co-Belligerant Air Force, based at Lecce-Galatina in 1944

Macchi C.202 Folgore Serie XI, MM.91859, in full Luftwaffe colours but flown by Italian pilots at Aviano, for airfield defence in 1944. Note underwing racks

Macchi C.202 Folgore captured in Sicily, carrying non-standard Allied insignia: RAF fin flash combined with four-wing position USAF stars. It appears to be an early Serie machine, without sand filter. This is probably the machine that was ferried to the US, where it received the Buzz No. FE-300. Rudder seems to come from a differently coloured aircraft.

Macchi C.202 Folgore of the 101° Gruppo Caccia, 5° Stormo, one of the few post-war 202s to see service. This aircraft was known as 'biancone' as it had a DB.605 installed instead of the normal Alfa-Romeo RA.1000 RC.41 (licence-built DB.601A). Very unusual is the representation of unit and individual number on fin.

Scale: 1/48

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The three main views (above and right) show a Macchi C.202 Folgore, of the 356a Squadriglia, 21° Gruppo Autonomo based at Volgograd (Russia) in January 1943. In the top view, the aircraft is shown in typical parked attitude, with open cockpit canopy. Scrap view at right shows the white section painted above and below most C.202 wingtips in North Africa.

Left: House of Savoy emblem painted at the centre of the fin/rudder cross.

Below: Macchi C.202 Folgore Serie VI, MM.9066, flown by Italian fighter ace Magg. Ennio Tarantola of the 151a Squadriglia, 20° Gruppo, 51° Stormo based at Foligno, summer 1943. Note the script on nose 'Dai Banana' ('Go on, Banana' — the latter being the pilot's nickname) and the tally on the rudder.

Left: Fuselage fascia markings, axe blade always pointing forward.

Scale: 1/48

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Production and Service
A high percentage of commonality with the C.200 enabled the Folgore to enter mass-production within a short time, though the majority of the 1,500 examples were built by Breda under licence rather than by the parent company, with SIAI Ambrosini also joining the production programme on a small scale. The prototype (MM.445) performed its first flight on August 10, 1940 at the hands of one of the most brilliant Italian test pilots, Commandante Guido Crestastri. It was evident that the new machine retained all the superb handling qualities of the C.200 while its top speed was nearly 1000km/h higher, no doubt through the benefit of higher power and sleeker lines. Macchi’s private venture paid off as the C.202 soon aroused great interest within Italian Air Ministry circles. Barely a month after its first flight, the Folgore was ordered into production.

Official tests at the Guidonia Test Centre and, later, over the ranges at Furbara, left no doubt that the C.202 was more than just a promise of attaining international standards. Macchi, on its part, managed to deliver the first production C.202 to Campofornido in March 1941 from where they were picked up by pilots of the 6° and 17° Gruppi of the 1° Stormo. Training continued throughout that summer until the 17° Gruppo was fully re-equipped in October. This was followed by its transfer first to Campion (Rome) and then to Comiso (Sicily), their final destination being Libya where they arrived on November 25, too late to reverse the massive British offensive which raised the siege at Tobruk. Italian air force Chief of Staff Generale F. Precola was sacked due to the delay with which he committed the C.202 into combat, though the transition period was mainly taken up by pilot training and the long time it took for the proper sand filters to become available.

Soon afterwards the 6° Gruppo joined the 17°, and a long series of transfers over the skies of Malta on October 1, 1941 when Capitano Pluda of the 9° Gruppo, shot down a Hurricane of No. 185 Squadron, killing a highly experienced pilot, Sqn Ldr Peter W.O. Mould (DWC and Bar); the Italian pilot was, in turn, to fall victim to Malta’s Hurricanes on November 8, when he was shot down over Grand Harbour. The 4° Stormo returned to Sicily in April 1942 for a couple of weeks while the 10° Gruppo of the 54° Stormo re-equipped with the new fighter. C.202s of the 15° Gruppo (51° Stormo) and the 23° Gruppo (3° Stormo) arrived in Sicily for further operations against Malta in May, when preparations were in hand for Operation C.3, the invasion of the Island which, however, never materialised.

The Tide Turns
By June the number of C.202s in Sicily had fallen to about 60, and in September these were reinforced by the 153° Gruppo for the final October assault. By that time Malta was well equipped with a strong Spitfire force, and there was little that the Macchis could do except fight a war of attrition. After the suicidal thrust towards Egypt which followed the success of the first half of that year in North Africa, the C.202s found themselves on the retreat once more. By January 1943 only a handful remained, operating with the 3° Stormo and one Squadriglia of the 13 Gruppo.

The Russian front saw the deployment of a small number of Macchi C.202s. In September 1942, twelve examples were distributed among the four squadrons of the 21° Gruppo still flying the older C.200. Their operations commenced in November, just before the Soviet counter-offensive which began on the 19th of that month. Most sorties flown by Italian fighters in this sector were directed at opening corridors for Italian ground forces which had found themselves surrounded. The final sortie was flown on January 17, 1943, a tragic end to a badly planned operation which saw the Folgore being sent unprepared and in too small numbers in such precarious conditions.

By July 1943, only about 100 examples of the C.202 could be found on Italian soil, most of which were concentrated in the South. During the invasion of Sicily, the Macchi fighter caused considerable losses to the Allies. In less than two months Italy capitulated, the remaining Folgores being taken over either by the Co-Belligerant Air Force, which was formed to fight on the Allied side, or by the Aviazione Nazionale Republican (ANR) of the newly formed Repubblica Sociale Italiana in the North. Activities with the ANR were restricted to training and airfield defence duties, while the Co-Belligerants used the C.202s, together with C.205s, as front line fighters until they were replaced by P-39 Airacobras and Spitfires. A few survived the war, and a small number were also refurbished, brought up to Macchi C.205 standard and sold to Egypt.

Within our restricted space we could only trace a brief outline of the operational activities of this aircraft. Unfortunately, its production was extremely hampered by the meagre output of about 40–50 engines per month from Allia-Russian (partly earmarked for the Reggiane Re.2001) while Germany procrastinated with supplies of original DB601s. Notwithstanding the tragic consequences in which the RA found itself during 1943, the Macchi C.202 remains one of the great fighters to be produced anywhere during World War II.

Richard J. Caruana

A last, desperate attempt was made by the Macchi C.202s of the 53° Stormo (153° Gruppo) to defend Sicily against the Allied invasion in July 1943 (RU Caruana Archives)

Panels of mis-matching colour schemes on the C.202, though not common, are frequently encountered. Here a Macchi from the 374° Squadriglia (153° Gruppo) in Sicily has a sparse mottled finish while ‘smoke’ ring patterns are applied to the engine cowling (RU Caruana Archive)

R4A "Ercs" pose around a captured Macchi C.202 at Luqa, Malta. The aircraft appears to be in good condition though lacking a cockpit canopy (RU Caruana Archive)
Note position and size of wing markings (upper similar). Axes on fasces always point forward and towards the wingtips.

Wing 7.7mm guns not always fitted.

Breda-SAFAT MC.12.7 12.7mm guns in fuselage as standard.

Sand filter on most versions after Serie II.

Note asymmetric wing area (shaded) to counter engine torque.

Underwing racks for external fuel tanks or bombs (rarely fitted).

Red wingtip nav. light.

Piaggio P.1001 propeller.

Green wingtip nav. light.

Scale - 1:48
MACCHI C.202 FOLGORE
PORT PROFILE
Early production standard without sand filter

A few early examples lacked aerial mast

MACCHI C.202 FOLGORE
STARBOARD PROFILE

MACCHI C.202 FOLGORE
PORT PROFILE
Major production standard with sand filter

Underwing rack (see other sheet)

Revised tailwheel fairings

FUSELAGE CROSS-SECTIONS

DRAWINGS BY
RICHARD J. CARUANA
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MACCHI C.202 FOLGORE
FRONT VIEW

Scale Aviation Modeler International
My minor obsession with the Typhoon was revealed in the August 1997 issue of Scale Aviation Modeller International (Vol 4 Iss 8), and at that time I had great ideas of laying in a batch of Monogram kits to complete a number of them. The only thing that has changed in recent months has been that my obsession is now based on one of the latest releases from Hasegawa, the first in what may become an expanding range of Typhoon aircraft.

Although the 'car door' type is not immediately familiar, I was delighted as it allowed me to model one of the many Fw 190 interceptors which I had picked out from the original 'Storms in the Sky' set from AeroMaster.

In general terms I would agree with those who have applauded the level of internal detail in this kit, but when I heard that Jaguars were about to release an update set for this aircraft I put the project to one side as, having worked with one of their Spitfire sets, I just had to include their update in my model.

**Detail Set**

On the other hand the detail on the Jaguars update set is absolutely phenomenal. There are 35 resin components and an etched brass feet with a further 38 parts, complemented by a photographic film providing the instruments. The detail on the parts is amazing and getting a good job out of this set is dependent solely upon the modeller's own ability.

**Getting started**

The delicacy of the Jaguar cockpit is such that I felt that the model would be substantially finished if I could get this collection of tiny parts successfully finished. After all the initial preparation, the inevitable gentle scrubbing with a worn toothbrush and a mild detergent solution, I fixed the parts, still attached to their casting blocks, to a block with double sided tape so the whole set could be sprayed with Halford's grey acrylic primer. This was the end of all the really easy work! The problem you have, if problem it is, with this Jaguar set is that so many of the parts are really minute. We're talking here of, for example, selector boxes that are barely a millimetre across. Separating these tiny parts from their resin casting blocks is not a task to be taken lightly. If there are any copies of 'Zen and the Art of Model Making' out there, then they should be consulted carefully before beginning work, for it's not a job to be done when one is in a distracted frame of mind. I used a variety of tools to separate the parts, these ranged from an ultra thin fine tooth razor saw to a new scalpel blade via a thin section needle file. Anything that would ease the parts away from the block.

**The Kit**

Hasegawa's kit of the Typhoon Mk IB is an impressive item in its own right. There are 86 parts, both clear and light grey plastic, with many being redundant including full pairs of unfaired cannon barrels and the rudder external mass balance for the earliest aircraft. Two colour options are provided; No. 175 Squadron and No. 198 Squadron, RAE. Both of these subjects are for 'Bomb-phoons', but modifying the kit to an early interceptor is a simple job; you just don't open up the flashed-over holes for the bomb racks.
without any real pressure being applied, otherwise the tiny fragments of resin could be catapaulted out of sight when they came away (Try working with the resin parts and your hands in a large clear plastic bag (so speaks the voice of bitter experience) - Ed.) The vast majority of the parts were fixed to some low-tack masking tape that was laid on a block of waste polystyrene. However, a few of the parts were left on their casting block after carefully carving away the thin membrane of resin that was left during the casting process. These parts included the control column, rudder bar, and gunsight mount.

One advantage that the basic Hasegawa kit parts have over the Jaguar parts is that they feature a separate cockpit frame for the cockpit sides, while the Jaguar set relies on a deep undercut under the structural members. As I'm in no way an expert in colour-washing parts after they are painted to give the effects of shadow I elected to pre-shade the structural side members by painting them a brilliant white against a black shadow effect. When the cockpit components were then sprayed with RAF Interior Green (#120 Aeromaster Acrylic Warbird Color) the pre-shading provided just enough of a contrast to give a realistic effect. The various control boxes, consoles and instrument panel parts were sprayed with what Jaguars call 'scale black' and I interpreted as an extremely dark matt grey. (Note: In the real aircraft these were anodised black - Ed.) To add a little depth to the various cockpit components I picked out the actual control knobs, switches, instrument bezels, etc. with Satin Black. Jaguar indicate in their comprehensive instruction sheet how the various switch boxes are arrayed within both the 'car door' and 'bubble-top' Typhoon. (In fact it's worthwhile pointing out at this time that the Jaguar set is really quite comprehensive, including as it does both early and late radiator intakes - the later type having the effect of the cardboard dust filter around the carb intake itself - the cutback rear armour for the bubble top type of canopy and a replacement anti-shimmy tail wheel suited to late production aircraft.) As I worked on the cockpit's interior I have to admit that I was stunned by the level of detail. For example, the throttle console has four levers, not just the throttle itself but also the radiator, propeller-pitch and mixture control levers as well. The control column is provided in two resin parts, the lower strut and the articulated upper half which ends in a beautifully detailed spine grip, and includes an etched-brass part representing the upper pulley and the chain drive to the ailerons. However, working on parts as tiny as this does generate some nit-picking attitudes and I felt it necessary to add the T-shaped control handles to the right cockpit console, and I also used some of the redundant control levers on the etched-brass fret to replace some missing levers on both the left and right consoles, and the door-lock handle on the resin door. (Upon checking with Jaguar it appears that the T-handles should be moulded on the console, and it's possible that my review set was slightly lacking in this area. This only goes to show that reviews aren't based on specialist selected kits.) The only work that has to be done on the basic kit parts to make them accept the detailed pieces a thinning down of the cockpit coaming. I cut all but 25% of the plastic on the head and front cockpit parts for the resin back plate to the instrument panel, but found out later that this was a redundant effort. More on that later.

Following advice from Roy Sutherland of Jaguars, I assembled the entire cockpit as a 'kit' before installing it through the wing aperture in the bottom of the fuselage. Fitting the resin parts together was a delight, for they have tiny locating pins and sockets that would put many an injection moulded kit to shame. With the benefit of hindsight I would install the gunsight and its mount from below before installing the cockpit tub. I left it until the last minute and found it impossible to properly place the sight and its tiny little strut under the cockpit coaming after construction.

Cutting plastic
After the intensity of working with such tiny parts I thought that the assembly of Hasegawa's kit would be a doddle, but I was to be proved wrong. The major problem came about because of the way Hasegawa have tried to cover all their options by producing fuselage halves with the separate segment around the cockpit opening to cover both the bubble top and car door aircraft. Strangely I found that...
most of the problems revolved around the right fuselage half, so it is entirely possible that I had a slightly aberrant kit. There’s been a fair amount of discussion about the best way of assembling this area of the kit and I elected to fit the small upper parts (J1 and J2) into their respective fuselage halves before further assembly. I found that the left insert fitted almost perfectly and required no more than a light sanding and polishing with toothpaste to give a good finish. However, the right panel (which included the space for the car door) presented a really terrible fit which required several filling and sanding operations to provide a tidy finish. However, I was dismayed to find that after all this work the insert parts failed to meet on the fuselage centre line and wedges of plastic card had to be inserted to bridge the gap. Before the joint could be completed I had to work ahead and check that the cockpit canopy would fit properly, and I made use of the closed canopy (part K1) as a template in this task.

A major problem came about as a result of the way in which the forward cockpit coaming had been thinned down, for there was so little plastic left a strong joint could not be formed and evidence of this can still be seen on the finished model. Once again with the benefit of hindsight I would suggest that a possible cure to this would be to fix the resin base to the instrument panel into place with a strong gap filling adhesive before the upper join is completed to hold all the pieces in place before the filling and sanding work is done. As it was, I discovered that I’d scraped away far too much plastic by offering the two insert pieces together when they were being modified to accept the resin instrument-panel section. I’d have been better off allowing for a 1mm gap.

From this point on the work was very straightforward. The radiator insert, whether the original kit parts or the very neat resin items in the Jaguar kit, can be inserted through the wing opening after the fuselage halves have been assembled and the joints cleaned up including the part #A6 which forms the upper lip of the radiator intake. During a dry run of the major components I discovered that it would be easy to produce large gaps between the upper wing panels and fuselage side, so a little bit of effort was needed here as well. The main lower wing panel was glued into place into the fuselage, taking care to keep the rear join line as neat as possible. I then glued the upper parts of the wings against the fuselage sides and left all the joints to dry fully before closing up the upper and lower wing panels. This reduced what may have been a major filling and sanding operation to a simple ‘blood and wipe off’ task with Tippex. Incidentally, take care here to make sure the cannon barrels line up accurately or you may end up with some very oval sections when the join line is tidied up.

I like to cut away elevators from tailplanes whenever time permits to droop them slightly, and when I was doing this I noticed some very odd ‘edge’ shapes on the elevators. I can’t imagine what they are supposed to be but could I see any photographic evidence for them in my reference works, so I carved them off and polished the marks away. It’s possible that by the time this review is published I might see some concrete evidence that suggests they should be there but as I write I am quite happy to remove them.

With the airframe substantially completed it was time to check out all the major joints prior to the model’s first coat of sprayed undercoat. Once again I found that the right fuselage half had caused problems, this time there being some anomaly that prevented the trailing edge of the wing and the root fairing closing up properly. Pegs and spring clips helped a lot to force the parts together, but even so some filler was needed in this section.

This is result of your scribe’s efforts with the Jaguar set. The greatest ingredients the builder has to provide are patience and foresight rather than pure skill, for the parts all but clip together.

This is the Hasegawa cockpit built straight out of the box. It’s not realistic to expect this to be to the same standard as the Jaguar offering for it’s produced for a different market, but the potential is here for the experienced builder to produce a comparable product if they felt the effort was required.
Fine Details
There is something about the Typhoon that makes it look massive and substantial even in model form and this leads to the risk of some clumsy handling. At least that is what happened to me. I had the mistake of adding the various fine details, such as the pitot head and the whip aerial on the underside, and I knocked these off repeatedly between the completion of the airframe and final assembly. I'll learn from this lesson and in future I'll be cutting these small parts away from the sprue and gluing them to the part in some out of the way area by their contact points where the scar won't show, and they can then be sprayed en-masse along with the basic airframe.

Working with these small parts reinforces the point that this kit has some superb mouldings. Tiny items like the whip aerial and retractable footstep and the various undercarriage legs and retraction struts are really quite superb. On the other hand the radiator flap has a very crude trailing edge while the cannon barrels (specifically the redundant un-faired ones) look like something from a Dalek in a 1960's episode of Dr Who. The bombs that are supplied in this kit are 500 pounders and I was mildly disappointed not to find some early war 250 pounders for my spares box desperately needs some of these. Mention must be made of the very neat, separately-moulded sway braces on the bomb racks. Wheel, propeller and optional exhausts are all very neatly produced, and Hasegawa have begun to use 'Poly-caps' to provide a neat, glue free fixing where appropriate.

The Jaguar pack contains several items that very effectively replace the kit parts. These include some beautifully moulded exhausts, both open and shielded, and replacement tyres and tailwheel. At first glance the mainwheels appear to be no better than those applied in the kit, apart from an effective beaded and flattened effect, but they do include a castellated nut at the hub centre. Notice that the replacement tailwheel in the Jaguar pack represents the later 'anti-shimmy' type and is not relevant to the subject model. Before the cockpit canopy can be fitted the enclosed part of the upper fuselage has to be painted and I remain unsure as to the exact colour that should be used. There is evidence to suggest that it should be Ocean Grey and/or Dark Green rather than the expected RAF Interior Green, and I decided to use Ocean Grey (in all Typhoons and Tempests this area is matt black -Ed). The high level of detail extends even to this small area of the kit, with both the clear light and the miniscule rear strut to the head armour being reproduced in the Hasegawa kit.

Covering up
I have become quite keen on the expanding range of Aeromaster acrylic paints and made use of these and also new 'bagged' paints from ModelMaster. After fitting the opened canopy (part K3) with Humbrol Clearfix I sprayed the cockpit area with RAF Interior Green. The first spraying session attended to the Insignia Yellow (ModelMaster #E0993) wing leading edges and upper wing stripes, while the fuselage band and spinner was sprayed with UK Sky Grey (paint #1114) from the Aeromaster range. These were masked off the high visibility striping on the underside of the wing was sprayed with matt white and matt black from the ModelMaster range (paints...
Polished Steel from the same range. A light buffing up brought out all the moulded detail, especially the weld seams and the open ports in the Jaguar exhausts. Smoke stains were sprayed on using Xtracolor Exhaust (X304) and paint chipping was applied around the various access panels with flecks of Humbrol bulbs. The navigation and landing light covers were fitted with Humbrol Clearfix while the replacement resin door was glued into place with superglue. The last touch was the addition of the radio aerial from heat stretched clear sprue, and though the box top artist suggests the use of Spitfire-style IFF aerials I could see no evidence of these in any photographs so didn't fit them at this time.

(The two IFF aerials were only fitted to the Typhoon once the TR.9 radio was upgraded to the VHF TR.1143 installation - Ed.)

**Summary**

Well, though the Jaguar set is an absolutely superb item the kit from Hasegawa is a little

---

I used the markings of a No. 257 Sqn, machine flown by FgOff Cedric Mannan in April 1943, found in the original AeroMaster sheet 'Storms in the Sky'.

Note the exposed cannon barrels taken from the kit, parts #08

And as a tailpiece to the cockpit comparisons, here's the Jaguar cockpit built up by the manufacturer, Ray Sutherland, who really knows what he's doing!

---

I did not know whether it is the age of this sheet, or that the model needed further coats of Klear, or it may be that my decal setting solutions have gone 'a bit off', but I found that some of the decals silvered badly. My thanks go to the anonymous young lady at Hannants who made a special effort to get a new supply of AeroSid and AeroSid to me by next-day delivery, for these helped a lot to settle the decals down. Alas the job is not perfect but with a deadline approaching fast there was no time to replace the decals.

Incidentally, the kit decals look and work extremely well, my not using them on this project was just a matter of personal choice. The register is excellent and the often-problematic RAF Sky comes out looking very good. The sheet includes the black underwing stripes and the wing root walkways and a handful of stencil details. My personal view is that the red and blue of the roundels and tail flashes look a little too dark, but I don't claim to be an authority.

With the model finished a coat of ModelMaster matt varnish, once again from their range of bagged paints, was sprayed on to complete the task. Final assembly then took a few hours. The exposed gun barrels (parts Q8) were sprayed with Gunmetal from the Humbrol Metalcote range, while the exhausts were sprayed with Old AeroMaster sheet, 48-059

'Storms in the Sky'. I do not know if it is the age of this sheet, or that the model needed further coats of Klear, or it may be that my decal setting solutions have gone 'a bit off', but I found that some of the decals silvered badly. My thanks go to the anonymous young lady at Hannants who made a special effort to get a new supply of AeroSid and AeroSid to me by next-day delivery, for these helped a lot to settle the decals down. Alas the job is not perfect but with a deadline approaching fast there was no time to replace the decals.

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With the model finished a coat of ModelMaster matt varnish, once again from their range of bagged paints, was sprayed on to complete the task. Final assembly then took a few hours. The exposed gun barrels (parts Q8) were sprayed with Gunmetal from the Humbrol Metalcote range, while the exhausts were sprayed with Polished Aluminium.

I took note of some of the suggestions made by Mike Hyrons in his build of the Monogram Bf 110G in the February 1999 issue of SAMI, particularly relating to cutting circles out of masking tape and applying the tape to wheels to help when spraying the effect of a mud stained tyre. I drilled out the inside of the navigation lights so that a drop of paint could be applied giving the effect of a bit of 'Curate's egg'. The kit shows a lot of fine detail but there are some fairly serious problems with fit. None of them are insurmountable but they are a surprise in a kit from a manufacturer of such stature. I understand that a bubble-top version is on its way and I would hope that this represents the 'original version' (Hasegawa have a funny habit of releasing the 'less popular' variants first) and would therefore not have the same problems.

In general terms size and shape both appear to be spot on and what fit problems there are can easily be resolved. With these points in mind I can happily recommend this Hasegawa kit to all but the most inexperienced novice, while the Jaguar update set is a neat piece of work that demands a lot of patience and a modicum of skill.

My thanks go to both Amerang and Jaguars for providing these review samples.

**David Batt**
**Grumman F-14D Super Tomcat**

### Technical Data

<table>
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<th>Manufacturer: Revell®</th>
<th>Scale: 1/72nd</th>
<th>Price: £TBA</th>
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<tr>
<td>Type: Injection Molded Plastic</td>
<td>Parts: Clear 4</td>
<td>Decal Options: TBA</td>
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<tr>
<td>European Distributor: Revell® Binney &amp; Smith (Europe) Ltd</td>
<td>Fax: 01254 342110</td>
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### The Kit

This all-new tooling of the last version of the great Tomcat, is due for release by Revell®! in the second quarter of 1999 (April to June) and we are extremely privileged to have a test shot of the tooling directly from Revell, Binney & Smith (Europe) Ltd for evaluation. The kit we have is without decals, instructions or packaging but the level of detail is near to the production standard we will all see once the kit is mass produced.

The main parts of the kit are contained in two sprues, with an additional sprue, half that size, for a number of additional parts and the final sprue is a very small one offering two pylons, the instrument panels, TARPS podium and instrument panels. The model features nicely recessed panel lines throughout and the level of detail, even on this test shot, is the equal of anything you will see from Japan. Weapons load comprises the four Phoenix missiles for under the fuselage only, and no pylons are included for the wings, or flaved-over holes in the wing panels for their possible installation. The cockpit interior is offered as a 'tub' into which go the three-part ejection seats (very nice!) and control columns. The instrument panels and side consoles are devoid of raised detail on our example, but we are unsure if this indicates that this will be added at the final stages of mould preparation, or that the kit will feature decals for these areas.

The fuselage is split just aft of the cockpit area, with the entire nose being a separate assembly. The extreme end of the rear fuselage is also separate and the afterburner 'cans' and 'tail feathers' are all nicely detailed. The fans for inside the air-intake trunks are also included, so there is no 'see-through' effect in this area and the wings look as if they are designed to operate (as are the tailrions). Wheel wells have a mass of pipework detail and the wheels, although not 'weighted' as is the vogue today, do feature clear and well cast hub detail. The undercarriage doors have internal details and the main and nosewheel oles look good even at this stage in mould development. The final item in the kit is the clear sprue (please pack this separately Revell®!) and this offers the main canopy in two sections and two light lenses. Surprising, considering that the HUD frames are included on the main sprues, there are no clear lenses for these units on the clear sprue.

### Colour Options

At this date we have no indication as to the colour options that will be available in this kit. Suffice to say that they will all (unfortunately) be low-viz schemes.

### Conclusion

This is certainly a quality product from Revell®, and I can only hope that they will continue investing in new aircraft kits in the coming years. The level of detail and finesse of moulding in the example we had is easily as good as many other manufacturers out there, and I can bet that this kit is going to be very accurate. The choice may make many go 'oh no, not another...' but Tomcats have appeal, and with the budget cuts in the USA, they are soon to be a thing of the past. I am sure all USN fans will love this, and the Tomcat is also one of those types that may excite and entice younger modellers to our hobby, and that has got to be a good thing.

Our thanks to Revell®, Binney & Smith (Europe) Ltd. for the chance to see this model.
The following listing shows all the kits that we have been advised will be (or are meant to be) released in 1999. All subjects are arranged alphabetically and do not reflect the sequence in which they will be released. Although some release dates are known, none of these are included as they are invariably inaccurate!
Panavia Tornado ECR "Tiger Meet '98" + 1/72nd (IM) Aguila A-109K/REGA (ex-italeri) + Boeing-Vertol H-21 "Huey" (ex-italeri)

Aircraft Range

Revell®
1/48th
Airbus A-321 B747-300 "Eurosped" + Boeing 737-800 Dassault Rafale M

Do-X + Kamov Hokum 'Black Shark'

Department

Revell-Monogram
1/48th
Focke Wulf Ta 154 Moskito (ex-Dragon)

RS Models
1/72nd (R)
Arado Ar 65
Avia B 158
Avia B 322
Avia B 122
Avia B 123
Avia-Fokker F-X
Bell XP-1 Aradata
Heinkel He 116/0
Kawasaki J6K
Kobeleske TE-60
Lookheed XP-38
Messerschmitt Bf 103
Praga E 210
Regano Re:2007
1/72nd (IM)
Praga E-39

RugRatResin
1/72nd (R/WM)
Arm 748

RVHP
1/72nd (R)
Aero A-18C
Letov S-218 Komar

RV Resin
1/72nd (R/WM/EB)
Junkers Ju 88
Mistel 38 (Ju 88H-4 & Fw 190A-8)

S Models
1/48th (VF/RI)
Valente P-51B Mustang

Sanger
1/48th (VF/RI)
Antonov An-124 Curl
Armstrong Whitworth Whitley
Beriev Be-12 Tchak
Cesna Citation T
Fairchild Metro II
Focke Wulf Fw 200 Condor
Fouga Magister
Percaiol Protoc
Short Stirling VII
Sud Vautour

Sasquatch Scale Models
1/144th (IM)
Beechcraft 1900 'C
Convair 240
Convair 600
DHC-6 Twin Otter

Select Gallery
1/72nd (IM/VE/RI)
Briston-Roman Trident
Pilatus PC-6/B2-H4 Turbo Porter

Roseplane
1/72nd (VF/RI)
Farman F-4000
Olkja C.II
Royal Aircraft Factory Re-5

RotoCraft
1/72nd (R)
Atlas Plug (Puma) + Sud Aroturi II @ Westland Wessex HAS
Westland Wessex HAS

Sharkit
1/72nd (R/WM)
Bell X-14A
Bell X-14B
Bell X-5
Douglas V-2A
Horten HX
MBB/Rockwell X-31
North American YAF-28
Northrop X-24C
Republic XP-47J
Douglas Skybolt
Pegasus launcher
Vanguard rocket
Vought Regulus I

Sierra Scale Models
1/48th (VF)
Fairey Barracuda

Sign
1/72nd (R)
Fokker K.VIII
Musciet C.200 Saetta

Silver Wings
1/48th (R/WM/EB)
Arco (De Haviland) D.H.9a
Bristol Bulldog
Glaster Gamecock
Glaster Gauntlet
Glaster Gladiar
Glofer Fury
Glofer Hart
WACO YMF-5

Sinifer
1/48th (R/WM/EB)
Carters SC-11 Sea Hawk
Short Sunderland

Tamiya
1/72nd (R)
Herex He 219A Uhu
1/48th
Bristol Beaufighter TFX+
Fairey Swordfish Mk II
Glaster Meteor F.1 & V.1+

TC Models
1/48th (R/WM/EB)
Douglas World Cruiser
Glofer G.V
Saunders-Roe SR/6A
Vickers Widden

Toko
1/72nd (IM)

Unicraft
1/48th (R)
Anzani AS.31 fighter
Arado TEM 16/43-23
Belsey's 'Du-LK'

Weland "V/1966"
Dornier Do P59
Focke Wulf Fw 190V19
Focke Wulf Fw P1077
Focke Wulf Fw P207
Göpinger G9
Goodrich Duo-YD/2
Junkers SJ 207P
Martin Baker 'Tankbuster'
Beech V7 [jet helicopter]

Warrior Models
1/48th (R/WM)
Blackburn Roc
Blackburn Skua
Breda Ba 65/14
Flat CR 20
PZL 24

Welsh Models
1/144th (VF/RI)
De Haviland Sea Venom FAW.2
Hawker Sea Hawk
Hawker Siddeley Arizmore C.1
Gloster Javelin FAW.8
Ilyushin Il-18 'Aeroflot'
Lockheed Trainer K Mk 1
Supermarine Attacker FB Mk 2
Supermarine Swift RR Mk 5

Wingnut International
1/72nd (R)
Juakaus J 88
'Furchungsmaschine'
Juakaus J 88G-10 +
Republic XF-72
1/48th (R/VE)
Curtiss XP-87
Boeing FB-5
North American O-47

Zaklad Produkcji Zabawek
1/72nd (R/WM)
MG-31
Yokokaw UT-2

\textbf{KEY}

\begin{itemize}
  \item * = Re-issue (with/without new decals)
  \item + = Revised or converted tooling
  \item @ = Conversion
  \item # = Update with new detail parts etc
  \item $ = Note
\end{itemize}
The last of a famous line, the single Supermarine Southampton Mk X photographed in 1930. Powered by three 590hp Bristol Jupiter XFA engines, N252 was an experimental version of the classic boat with many modifications including a third engine. Apart from the revised interplane struts and tail assembly the hull was of stainless steel. Metal hulls became essential when boats such as these were expected to operate from tropical waters rich in marine life which literally devoured wooden hulls, regarding varnish as a sauce piquante. It is noticeable that on N252 some over-zealous painter has smothered the Scarff No. 7 gun rings in silver goo against regulations.

The Short Kent class 'Satyrus' of Imperial Airways delivered on 26th May 1931. The boat registered G-ABFC was designed for the important Mediterranean leg of the route to India and Africa. Powered by four 555 hp Bristol Jupiter XFBM engines the Kent class had duralumin airframes except for the hull below the water line, which was of high-grade stainless steel to prevent corrosion during long periods of open water mooring. Sixteen passengers could be accommodated in a roomy cabin considerably more comfortably than present-day jet travellers. Three Kents were ordered by Imperial Airways who confusingly listed them as the "Scipio Class", which was the name of the first of the trio. G-ABFC, seen here, survived until 1938.

The evocatively named Short Rangoon S1493 making a pass over the Medway in 1930. This was the first of a class of five boats built between September 1930 and November 1932. Powered by three 540 hp Bristol Jupiter IX engines, the Rangoon was a military version of the civil Calcutta class employed by Imperial Airways on the Mediterranean leg of the India route. The boat was created to meet the demands of RAF crews operating in such places as Basra where No. 203 Squadron was located. The Rangoon provided the crews with such luxuries as well-ventilated roomy hulls, adequate fresh-water tanks, bunks, a kitchenette and a toilet, all in a metal hull which could endure the orduelas of the local marine life.

The stately Blackburn Perth K4011 was originally known as the Iris VI and was designed to meet Air Ministry specification 20/32. Spanning 97 feet, the boat was powered by three 625 hp Rolls-Royce Buzzard IIMS engines and offered the pilots the luxury of a totally enclosed glazed cabin. Four Perths were built replacing the Iris boats of No. 209 Squadron based at RAF Mountbatten in 1934. They were conceived to carry out long sea patrols, fleet co-operation and anti-submarine work with the 37mm COW (Coventry Ordnance Works) cannon that could be fitted on the bow in place of the Scarff ring. One Perth so fitted was the subject of numerous press photographs in the 1930s in which the Perth was invariably described in the usual accuracy of the hack journalist, as a flying battleship, which it was most certainly not.
A glance back at some of the silver sentinels of the empire

East of Suez...

by Harry Woodman

The mightiest of all, the Short Sarafand S1589 was a one-off design inspired by the idea of a flying boat capable of crossing the Atlantic. Work on the 120 feet giant began at Rochester in the summer of 1931 and the final assembly had to take place in an open barge yard because of the height. Basically a stretched Singapore, the Sarafand was powered by six 825 hp Rolls-Royce Buzzard II engines, adding up to an all-up weight of 32 tons and a range of 1,450 miles. It was taken on charge by the RAF and eventually used for an extensive series of tests at Felixstowe where it was scrapped in 1936. The big boat provided valuable information and data on aeromarine structures which eventually led to the great Short monoplane boats and the immortal Sunderland. Seen above is the hatless Oswald Short in conversation with a group just after the Sarafand had been fitted with its top wing.

The camera has caught Short Singapore II (modified) N246 just at the moment when the hull 'unsticks' from the Medway. This photo was taken on 23rd November 1933 with test pilot John Lankester Parker at the controls. After serving as a development boat for the magnificent Singapore Mk III the boat ended its days being hoisted by the hammerhead crane at the MAEE at Felixstowe and dropped sixteen times on to the water from heights varying from two to fourteen feet. This was to test the strength of the structure and despite damage to many components the planing bottom remained intact.

One must imagine what a sight these three Singapore Ills of No.209 Squadron presented as they winged their way over the Orwell to Felixstowe in May 1938. The sound of twelve Rolls-Royce Kestrel XVI engines was enough to emphasise the squadron's motto 'Might and Main'. These great aerial "gunboats" served well in the hot spots of the Persian Gulf and Aden (of unbeloved memory) and the Far East. Seven squadrons operated Singapore Ills and some were still in service in WWII, with No. 203 Squadron not receiving its replacement Blenheims until March 1940. In August 1941, No. 205 Squadron based at Seletar (Singapore) passed on their remaining Singapore to the RNZAF at Fiji, the old silver sheen now subdued in dull camouflage. They served in the Pacific until 1945 when the New Zealanders finally received Catalinas. The nearest Singapore here was K6919 (Y), the middle boat is K6567 (M) and furthest is K6914 (C).

With the six Rolls-Royce Buzzards at full throttle in a crescendo of sublime sonority trailing a cloud of spume and spindrift, the largest British biplane flying boat roars down the Medway on June 30th 1932 with John Lankester Parker at the controls: a fading cameo of an age long passed.
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Gunsight

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Aero Feature **DOUGLAS A-26 INVADER**

**B-26** with false markings of "Cuban Fuerza Aerea Revolucionaria", actually employed by C.I.A. from Nicaraguan airstrips during Bay of Pigs landings. This aircraft landed at Miami Airport on April 15, 1961, piloted by the 'deserter’ Mario Zuniga.


**B-26B**, USAF, 730th Bomb Squadron, Miho, Japan, Autumn 1950. Employed in Korean War, the aircraft is entirely Olive Drab with replaced tail in aluminium. Napalm tanks in Orange Yellow.

**B-26**, Fuerza Aerea Salvadorena, 1969, during the so-called "Soccer War".


© Michele Marsan, 1999.
Messerschmitt Bf 109G-12
(mid-range version)

Perhaps not as well known as standard Messerschmitt 109s, the G-12 was a two-seat, unarmed trainer version of this classic fighter, with around 100 "G" models (G-1, G-2, G-3, G-4 and G-6) being converted in 1944 to help speed up pilot training programmes. Like the standard '109s, the G-12 was powered by the Daimler-Benz DB605A engine, giving a top speed of 390MPH, at 21,000 ft.

The Kit
Moulded by Falcon of New Zealand, the kit has all the "qualities" one would expect from a kit of this nature. The sprue gates are big and chunky, the trailing edges are quite thick, and the parts look as though they lack detail and finesse. This is not true! The panel lines are finely engraved, so finely engraved they do not become apparent until paint is applied. The kit is made up of 47 (I think) plastic parts, 10 metal parts, and 2-vac-formed canopies, (flat and curved top). The kit represents the plane converted from the standard G-4 variant. When the builder takes the kit out of the box, the plastic parts feel quite oily. A quick scrub with lake-warm water and a soft scrubbing brush will take care of this minor niggle quite nicely.

I decided against exposing the engine on this model, as I was still recovering from an earlier Hasegawa/Verglittter Stuka build, which will feature later in the series, and I was also unsure which version of the DB605A was used. I have since found out, don't worry! Anyway, after going through the list of planes for this series, and the engine updates available, there are only around 6 I can stick an engine onto, and I subsequently decided that it wouldn't be worthwhile making the engine a standard feature - Oh, well!

Getting started...
Despite being a limited-run kit, I still freed all the parts when I needed them, instead of releasing them all in one go. The cockpit is made up of some 19 parts, 4 of which come from the metal department (the trim wheels). The fuselage sides have excellent sidewall detail, so all I added were seatbelts to both cockpits, from the Rev-heat set. The instrument faces have raised lines, so I filled them with gloss black, and dry-brushed them with white, instead of using decals (which would’ve come from the spares box anyway). The trim wheels are glued together to make pairs, but if installed like this, the cockpit floor/seat assembly will not fit. To remedy this, I fitted only one into each position, instead of the aforementioned pair.

The cockpit, when finished, was installed into the right fuselage half, although the floor and seats needed sanding down first, as they are slightly too wide for the fuselage (even after I had finished sanding the seats, the trim wheels still needed the fit). I managed to break off the rear seat (instructor’s) before fitting, and glued it on afterwards, which made things slightly easier. I would suggest removing the front 0.5mm of the rear sidewall detail on the left fuselage half, as it fouls the cockpit join as well.

When the oil cooler assembly is fitted, the intake (part 19) doesn’t fit. I probably didn’t sand the intake grill enough, but I opted to replace it. I stuck a lump of milliput to the inside of the intake, tucked the intake to the lower fuselage and let the milliput dry. After it hardened, I removed it, sanded the front of the milliput straight and scribed some grooves onto it to represent a matrix.

Next...
Before the wing halves can be joined, the wheel wells have to be sanded down, as they are too high. The builder has a good few millimetres to work with, so don’t worry about breaking through the roof of the wheel wells (guess what I did?!)... Onto the wheel wells themselves now. They have no detail, so some was added (see pictures). The spaces for the wheels were on a slope, so they were filled in with Milliput, and sanded down when dry (Again see pictures).

"The Armed Rovers" by Roy C. Nesbit has a good picture of a 109’s undercarriage, even though it’s a book about Beau missions in the Med! The detail I added is probably completely wrong, but gave a bit of interest to the finished model, so it can’t be all bad! The oleos lack the hydraulic line running down to the wheels, so this was added from the remains of an (old) kitchen sieve.

Stage 3 - Wings... Tailplanes... & filler!
The fit of the wings to the fuselage left a bit to be desired, with a gap appearing on both the top and bottom. I did the best I could to minimise the space, but resorted to filler to close the join completely.

The tailplanes were a slightly different kettle of fish. As it stands, they would butt straight onto the fin/rudder assembly, which wouldn’t last 5 minutes with this builder! To improve it, I drilled a small hole through the tail, pushed a length of plastic rod through it and cut it off so there was about 1cm sticking out on either side. After this, I bored holes about 5mm deep into the tailplanes, making sure the holes would align, (one thing less to get laughed at about!).

I pushed the tailplanes onto the rod, and shortened the rod until the tailplanes touched the fin. I slapped a bit of glue on, then went to watch TV while it dried. Once the glue had set, the gaps left around the join were filled and sanded smooth. Easy!

Stage 4 - Colouring Up
Oh, highly exciting, all 5 options are RLM 74 and 75 over 76, although each option has something to liven it up a little (even if it’s just a black spinner!). I chose the most "colourful option, because I knew I couldn’t live with a boring’109 on my shelves! The RLM 74 and 75 came from the Xtracolor range, and were applied with a brush. The RLM 76 came from the Aeromaster Acrylic range, and was also applied with a brush.

The decals, unfortunately came on a continuous decal sheet and had to be carefully cut out before application. I opted for "white 31" which had a white rudder and...
spinner. The decals went on well, although they definitely took their time coming off the backing paper. They settled down onto the model with Humbrol Decal Fix. I don’t know if they’ll silver, I ran out of Xtracolour Matt varnish and am waiting for more.

Stage 5 - Other Details

The only bits that still need attention are the canopy, pitot tube, mass balances and propeller. The propeller blades needed a reasonable amount of cleaning up before they could be fixed to backplate and spinner. The sprue gates are the main concern, which leave chunks on the blades after removal, and were tidied up with a nail file. They have no fixed attachment point, which means the builder will have to make sure they align at a common pitch and are straight when viewed from the side. I achieved this by sticking the spinner to the backplate, letting it dry and then adding the blades, aligning them by eye (and yet they still dried squint!)

The pitot tube and mass balances were easy enough to sort, I freed them from their metal sprue and stuck ’em on with dabs of superglue. The canopy was no bother either. I scored round it with a nice, sharp knife blade, “popped” it out of its base, cut it open (with care), added canopy restrainers from the sieve and fixed it to the model with Humbrol Clearfix. Behold, one rather nice Messerschmitt 109!

Conclusion

I made a few mistakes whilst building this kit, which I probably could have avoided if I was a bit more comfortable with limited-run plastic. I suppose I must be able to recommend it to people looking for their first limited-run kit, because it was mine! The only advice I would give is to get a bit (lots) of experience with “normal” kits.

For those who like to know these things, the G-4/G-12 is 18.7 cm in length, and 20.9 cm in span, which scales out to 29 ft 4.8 inches and 32 ft 10.8 inches respectively, against 29 ft 7 inches in length and 32 ft 6.5 inches in span. A little short in length, and a little long in span, but my measuring is nowhere near perfect. Accurate measuring or not, it’s not off the mark by miles, and perhaps more importantly, it looks like a ’109 which can’t be bad! Also, it’s a lot cheaper than using the JMG or one-o-nine conversions (see SAMI Vol. 2 Issue 7 P409 - July ’96 and SAMI Vol. 3 Issue 9 P164 - Sept. ’97 respectively) on a normal, single-seat ’109.

I enjoyed building this kit, for all its pitfalls, and if I wanted another G-12, I would probably go for this one. So there!

Kenneth Clapham
American aviation has fallen into disfavour, at least in the realm of modelling. Fanatics of US aircraft, especially in 1/72nd scale, will find little on the shop shelves to fire their passion. Manufacturers, major and minor, are all marching in the direction of esoteric Estonian and Serbo-Croatian creations; or else dream planes the Luftwaffe might have fielded had they fought on into the fifties. The souvenirs of state side specimens seem to be so many variants of P-51's and F-15's. This famine is recent, and fortunately follows a period of plenty: A half dozen years ago, cottage companies seemed to spring up daily, offering injection moulded gems such as Curtiss JN-4 Jennies, Thomas Morse Scouts, Calver Cads, and A-12 Shrikes. The majority of firms have since faded into oblivion, or else slipped into conformity with the fashion of the moment; though their creations can still be found in the pages of many mail order catalogues. The most promising (hence by its demise most disappointing) been-here-and-gone producer was Beemch Models, which debued with a Ryan ST/PT (Sport Trainer/Primary Trainer). This pretty little plane sorely deserves a spot in the 1/72nd line-up. It is historically significant, being the first mount of most WWII G.I. flyers; colourful, sporting the blue/yellow/red/white between-the-wars vestments; and, most important, it's just plain cute. The army trainer hails from a 1934 civilian design, pressed into service first for the CPL Civilian Pilot Training program. Members of the PT-16 to 22 numerical series are basically similar; differing mainly in powerplants, ranging from 95 to 100 hp. The PT-21 stands out from the crowd with a radial, rather than inline engine.

Years ago I had built a disappointing vacuum-formed version, so when Beemch's advertisement appeared in one of the modelling mags, I fired off the then-extravagant thirteen dollars and took up a vigil at the mail box. What Mr. Mailman delivered was a gross let-down. The bagged kit, sans details or decals, was too crude to bother with, so I went to the bottom of the probably-never-get-to-it pile, with the consolation that it could be later sold as a collector's titty, and that another company would eventually offer a better version. That second hope never materialized; so at the start of the current modelling season (coincidental with the end of the gardening season) the Ryan was exhumed as a challenging exercise of surgical skills. The kit's problems seem from trying too much too soon. Jim Uster, Beemch's founder, CEO, designer, draftsman, toolmaker, and production crew, explained in a phone interview that against his better judgment he had been talked into getting fancy with his first shot, molding wings and things as split halves instead of simpler solid items. Consequently, everything requires drastic plastic surgery - so radical that alterate major components are best sought for in the spares box.

Along with a vac-formed cockpit tub and acetate snippets for windshields, Uster included scale drawings and a list of published references. Dating from the sixties, they wouldn't be much help, except that my home base airport of Frederick, MD houses the headquarters of AOPA, the Aircraft Owners and Pilots Association, which maintains a library of books and periodicals stretching back into the fifties when the organisation was chartered. FDK is also the permanent roost of a real, live PT-22, and during the annual August warbird celebration, four to six more fly in. The references made good reading but amounted to info overkill, since a project this size can take just so much tweaking.

Getting Started

The first task was cleaning up the fuselage halves. Their mating surfaces were machined by rubbing on a sheet of 240 grit wet/dry glued to a glass pane. Cockpits had to be roughed open and the interiors thinned and smoothed with a variety of home fashioned scrapers and a ball burr choked at low speed into my Ryobi rotary tool. The cockpit tub was discarded, but before joining the body halves I stuck in a pair of bucket seats from the scrap box. This should have been put off until post-painting, since they complicated final shaping of the cockpit openings. The clam-shell sections went together passably well, but the aft section, particularly the vertical fin, was badly bloated and suffered from cellulite ('amorphous lumpiness' - a marketing term invented here and applied in reference to ladies' thighs, with the intent of extorting outlandish sums for reducing creams and schemes). Trying with files, emory boards, and graduated grits to recapture the original's swivel form, I reached a point of diminishing returns. The compulsion to strive for perfection was resisted by recollection of the hobbyists's three Golden Rules:
1. Magnifiers and micrometers are verboten near the display shelves.
2. Models are representations, not 'Honey-I-shrink-the-real-things'.
3. The arch enemy of 'Good' is 'Better'. After semi-final smoothing, a smattering of panel lines were restored. As a scribbling guide I use lengths of adhesive embossing label tape, which conforms to curves and is thick enough to steer the tool point.

The Wings

Refining to an acceptable level the kit's wing sections seemed more than too much trouble, so several stand-in candidates emerged from the junk box. The most promising was a lower wing from a Revell PT-17 Kaydet biplane. Using the scale drawings as a guide, each panel was shortened, narrowed, and reshaped at the tip. Leading and trailing edges had to be re-defined and the surfaces sanded, both to reduce thickness and tone down the exaggerated scalloping that represented fabric skin. The chord of the control surfaces ended up too wide but the error seemed acceptable. Their span had to be increased, so a bit of putty filled the old demarcation line and they were lengthened almost to the wing root, and divided mid-span into ailerons and flap sections. Trying to fashion pins or tab-slot unions for the wing-to-fuselage hook-up was also too much bother, so the assemblies were simply butt joined. To create a strong, fast-
Building a Limited Edition rarity right out of the box
(The spare parts box)

The injection moulded, pieced-together Ryan in a face-off with its radial engine, vac-formed cowling

grabs attachment. I first primed each surface with Plastruct Solvent Cement, then laid on a bead of Model Masters liquid cement, which really leans toward a gel and makes an excellent choice where gap filling and fast tack are called for. Getting a perfectly perpendicular plan-form is always a chore with these rough-molded kits, and despite jiggling mine ended up with a few degrees of sweep-back, though I've convinced myself it's not noticeable from normal viewing range. Since the drawings didn't include a head-on view, dihedral had to be eyeballed, using my old vac-formed version as a guide. Trailing edge fillets had to be fashioned from judiciously sanded globs of putty.

Tail
The kit's horizontal stabilisers were no more serviceable than the wings. A first attempt at replacements came from plain card stock, but after shaping and scoring they resembled nothing more aeronautical than scraps of plastic with scratched in lines. Some surface definition was necessary, even though it might not be entirely authentic. The tail section of a Monogram P-6 Hawk was close to the correct size and texture. To carve the correct planform, I photo-copied the drawing and cut out the tail, leaving a hair's width outside the outline. With spray adhesive this was stuck to the replacement part, centring on the fin/elevator hinge line. A mini drum sander in the rotary tool took the plastic down to the outline, then emery paper finished up and restored the edges. Trim tabs and diagonal bracing lines had to be scored in the elevators, then the edge joining the fuselage had to be filled to the proper attach angle.

Undercarriage & 'Bits'
The last major assembly was the landing gear, which needed lots of reshaping. Short of cannibalising my vac-formed version, no replacement was available, so the four gear halves were thinned, glued together, and tediously reworked. Masking would have been simplified, but complicated assembly by leaving them off until after painting, so they were held to the wing while everything was still bare. The locators holes for the exhaust were drilled out and stub pipes of stretched sprue were glued in. The cooling and air inlets in the cowl were cleaned up with a tiny Burr chucked into the rotary tool.

Colour Scheme
Most Ryans sported a polished aluminium fuselage, but the prettiest specimens wore bright light blue as a complement to their chrome yellow flying surfaces. The paint scheme was copied from one of the Frederick airshow visiters. Cockpits received zinc chromate, then were stuffed with tissue while the airframe was coated in Mandell Master Chrome Yellow. After masking, the body and running monofilament thread, so lengths of stretched sprue, pulled to the smallest possible diameter, were fastened with superglue. For a dandy precision glue applicator, don't blow a budget. Stick a sewing needle, point first, into a dowel, then nip off the closed end of the eye. The resulting prongs act like a fountain pen nib, holding and delivering minute drops of liquid or gel cyanoacrylate. The stretched sprue strands sagged a bit so a probe heated in a candle flame and held about an eighth of an inch from each strand caused them to contract and un-slacken. The parts box yielded up wings, struts, a tail wheel, and propeller of acceptable shape. The spinner seemed a bit stubby so it was enlarged by painting on several layers of white glue that shrunk back down nicely to the profile of the host. The finished plane might not win the Master Micrometer Award for Absolute Accuracy, but it's a fair representation of a colourful, historically significant aircraft that will likely never be available as a decent injection molded model - unless the major kit makers once again take up the cause of American aircraft.
Unknown! Dossier No. 1

Unknown! Dossier No. 1
by Justo Miranda and P. Mercado
Publisher: ReichDreams Research Services
C/Doctor 53 y C, 28008 Madrid, Spain
Tel: 01932 666426
Email: pmercado@fiujtsu.es

This is the latest in the very popular series of dossiers dealing with all manner of "what if" subjects. However, unlike previous examples, this dossier deals with aircraft of all nations, and does not focus on those designed for Luftwaffe use. The title is in an A4 format with 38 pages and colour only on the outside cover. Inside you get technical data, historical text and 1/72nd scale plans for the following types:
- E.Z.L. P56A 'Kania'
- E.Z.L. P56B 'Kania'
- Reman R.40
- Mitsubishi K7-62
- North American T.B. Mustang (rear mounted engine)
- Reggiane Re 2006
- V/L. Pylremyskry
- Skoda-Kubu V5
- Arsenal VG 60
- Nikitin-Shevechenko IS-4

The Airports of Prague 1918-1946

The Airports of Prague 1918-1946
by Lubomir Dulaccek
Publisher: Publishing House MBI, Praha
UK Distributor: Czech-Six Publications
48 Station Road, Stoke D'Abernon, Cobham, Surrey KT11 3BN
Tel: 01932 666426

This title comes as a hardback in A4 format with 200 pages all in black and white. The quality of the title can be appreciated when you handle the book, as the paper weight and finish is very good. The book itself, as the title would suggest, deals with the airports of Prague during the 1918 to 1946 period and although this may seem of little interest to modellers, the mass of period photographs will be of great interest to many. The actual text is split into Czech and English on each page and all photos are captioned in both languages. Each airport is dealt with in turn, but the text is arranged so that each is looked at in relation to its building. The title therefore starts with the first airport which was at Strasnice in the eastern suburbs of Prague, then moves on to Kbely, the first real airfield of any great capacity. Air Law and the start of the first air carriers (mail services etc) are covered next. Aviation expansion and development are covered next and this is followed by a look at the expansion and re-opening of the site in 1937. The period just prior to WW2 is covered, with the reduction in Czech operations and this is followed by a look at the development of the airfield during the 1939 to 1945 period. Here of course you come across the Luftwaffe's use of the field and there are a number of excellent photographs of Luftwaffe machines. The wartime period ends with the Russian troop's arrival and this is followed by the final chapters which look at 1946 to 1946 period and the reconstruction and growth of the airport during that time. Overall, this is a high quality product which will interest the modeller and aviation historian alike. The mass of photographs from the 1920s and 1930s make this a title I am sure many civil aircraft fans will want, and I can't blame you - this is a wonderful book!
Our thanks to Czech-Six Publications for the review sample.

Hydroaeroplane

Hydroaeroplane M-9 & M-24 Pt 1

Hydroaeroplane Type M-9 & M-24 Pt 1
by Andrei Alexandrov
Price: £8.50 (plus P&P)
UK Source: The Aviation Bookshop
655 Hollowway Road, London, N19 3PD
Tel: 0711 272 3520 Fax: 0711 272 9761

This title comes in an A4 format with 28 pages of contents and a laminated card cover. The text is actually all in Russian, but anyone buying it via The Aviation Bookshop will receive a complete English translation as well. Basically it looks at the design, development and service use of the M-9 and M-24 'hydroplanes'. This first part of a two-title set looks at the M-9 and there are a mass of black and white photographs showing the design, construction and use of the type. The centre pages contain a complete set of 1/72nd scale plans and secured into the same place is a large fold-out set of plans in 1/48th scale. The book is an excellent source of information, both historical (via the English translation) and detail (via the photographs) on this type and one I am sure all modellers with an interest in this era and subject will be wanting to add to their library.

Hydroaeroplane M-9 & M-24 Pt 2

Hydroaeroplane Type M-9 & M-24 Pt 2
by Andrei Alexandrov
Price: £8.50 (plus P&P)
UK Source: The Aviation Bookshop
(see address above)

This is the second part of the two-part set on these types and it is once again in an A4 format, but with only 24 pages of contents. This second part looks at the design, development and service use of the M-24 and it's basically similar in layout to the previous one on the M-9. Once again a wealth of photographs and diagrams illustrate the design, construction and use of the M-24 and in the middle pages there are those 1/72nd and 1/48th (fold-out) plans.

Hydroaeroplane M-5 & M-20

Hydroaeroplane Type M-5 & M-20
by Andrei Alexandrov
Price: £8.50 (plus P&P)
UK Source: The Aviation Bookshop
(see address above)

This title is also in an A4 format with 28 pages of contents and a laminated card cover. Once again this title comes with an English translation and deals with the design, development and service use of the M-5 and M-20 designs. The vast majority of this title deals with the M-5 and there are both 1/72nd and 1/48th scale plans of this type included. The M-20 is only covered in the last eight pages and no scale plans are included for this version.

Hydroaeroplane M-9 & M-24

Hydroaeroplane Type M-9 & M-24
by Andrei Alexandrov
Price: £8.50 (plus P&P)
UK Source: The Aviation Bookshop
(see address above)

Overall each of these titles will appeal to anyone interested in this series of designs, in early Russian aviation, or in floatplanes in general. The amount of detailed photographs and scale plans alone make them worth considering, and the inclusion of the English translation also makes them a great source of information and technical data.
Our thanks to The Aviation Bookshop for the review samples.
Thunderbolt: The Republic P-47

This title follows on from the one looking at the P-47 in the ETO and it also has an A4 format with 64 pages of contents and a laminated card cover. The majority of the contents are in black and white, but there are also eight pages of colour artwork included.

As with the ETO title, this latest one looks at the use of the P-47 and starts with a look at the evolution of the P-47 design. This is followed by a look at the 5th Air Force and the groups and squadrons that operated within it. Those covered include the 8th Fighter Group (36th Fighter Squadron), 5th Fighter Group (FG), 17th FG, 85th FG and the 348th FG. Each section gives a narrative history of that unit's use of the P-47 in the Pacific Theatre and there is a good selection of general and close-up views of the aircraft and their markings. The 7th Air Force is dealt with next, and this includes coverage of the 15th FG, 318th FG and the 50th FG. The 10th Air Force is next with details of the 1st Air Commando group, 33rd FG and 80th FG. The 14th Air Force includes the 81st FG and the 20th Air Force includes the 413th FG, 414th FG and the 507th FG. By this stage you reach the small coverage of non-American use of the P-47 in this theatre, with the Mexican Air Force, Royal Air Force and Chinese Air Force. Each of these sections includes a load of black and white photographs as well as those eight pages of colour side profiles. The final few pages include a selection of nose art including 'Too Big and Too HEAVY' the machine chosen for the recent P-47K1 kit by Revell-Monogram.

This is another title which can be highly recommended to all USAF fans and anyone considering making any P-47 variants, as it is a source of both information and inspiration.

Our thanks to Squadron-Signal Publications for the review sample.

Walk Around - B-17 Flying Fortress

This is the latest title in the 'Walk Around' series from Squadron and it comes in the usual A4 landscape format with 80 pages split page into a 50/50 mix of colour and black and white.

As with all the other titles in this series, this one takes a look around, inside and out, at the B-17 and utilises both period photographs and (more extensively) modern colour pictures of preserved examples in the USA. The aircraft used in this title include 'Aluminium Overcast' owned by the EAA, 'Thunderbird' owned by the Lone Star Flight Museum and 'Shoo Shoo Shoo Baby' of the USAF Museum. The coverage deals with all areas of the B-17 airframe and as well as the photographs there are line drawings to show differences between the variants in such areas as the bombardier's glazing, crew seats and armament. The colour coverage is excellent, and most of the black and white photographs interspersed with them are period ones that show the B-17 in service. Every area of the airframe is covered, with details of the armament and even the SCR-287A liaison radio equipment. My favourite shot has to be the APU on page 54 with the author's comments that 'that is a roll of toilet paper', as the Elsan is just out of shot behind the APU. Towards the back of the title there are four pages of colour artwork depicting 12 B-17s in a number of guises.

This is an excellent title and one we can highly recommend to all B-17 and potential B-17 modellers.

Friedrichshafen FF 33E

This is the latest addition to the ever-popular Windsock Datafile series and it comes in the usual A4 format with 36 pages of contents and a laminated card cover. Only the outer cover pages are in colour, while the rest of the contents are in black and white.

This latest title deals with the FF 33E, a type that was probably the most extensively built machine of its type in WWI. The author covers the design, development and operational use of all versions of the FF 33E and this includes the very famous Wolfschen 841 which was shipped aboard the German raider Wolf and used to spot and assist the raider in its work. As usual with any Windsock Datafile, this one includes a mass of clear black and white photographs, all of them of great use to the modeller. In the centre pages there are a set of 1/72nd and 1/48th scale plans of the FF 33E with both wing and fuselage cross-sections included.

As always, the last section of the title looks at the subject of camouflage and markings in relation to the FF 33E as well as giving technical data for all the blocks of F 33E (and F 33S) aircraft built.

This is another very good title from Albatros and one I am sure all WWI fans will want to add to their library.

Our thanks to Albatros Productions for the review sample.
Luftwaffe Color Chart

We all know how confusing it is to understand the subject of Luftwaffe colour and markings, and we also know how much conflicting information there is out there. Well, Eagle Editions have now produced this excellent colour chart to help all Luftwaffe modellers. The chart is a two-and-a-half page fold-out card with 50mm square colour samples attached. There are 31 samples on the card and these cover all the well known colours, plus examples of alternatives (e.g. Sandgelb - "Italian Sand"). The flap of the half-page element also contains a list of each colour along with a list of their main applications (very useful). I am sure many of you will go, "Oh yes, another colour chart!", but this one is very different. Each of the colour samples has been produced by Warncke & Böhm and this is the firm that made all the paints for the Luftwaffe during WWII. Each sample has been completely matched to original samples and examples held by Warncke & Böhm using modern spectrophotometric measurement. Eagle Editions and Warncke & Böhm therefore authenticate this chart and identify it as the most accurate list of the actual colour specified by the RLM (German Air Ministry) from 1933 to 1945.

Well, what can we say, except that all Luftwaffe fans should have one of these in their library, as it is an instant one-point reference list for all Luftwaffe colours (except field applied ones). Luftwaffe fans will lap this one up, so get one quick! Our thanks to Eagle Editions for the review sample.

Bookshelf Update

Plastic Kit Constructor

Celebrating its 21st year in business, PAMAG’s latest edition of PKC is currently available. This edition includes the usual mix of kit, decal and accessory reviews, along with a nice build of the Dornier Skyshark, a bit on the Wetland Welkin and a conversion of the P-39 to the XFL-1 Airbotina.

The 32-page magazine is quarterly and sells for £4.00, so for more information contact: PAMAG at: PAMAG (Publications) Ltd., 3 Lowfield Court, Old Forge Business Park, Sack Road, Hedley, Gateshead, S2 4JE. Tel: 0114 2530641. Fax: 0114 2532471

FAMAS

The latest edition of the Frog & Airfix Model Aircraft Studies journal is now available. This 17 page edition looks at the 1/144th scale Mig-21, Mig-23, F-16XL, F-20 and F-4E, as well as the E-3D Sentry (1/72nd), Concord (1/144th), a bit on the Airfix Mosquito NE11/BR XVIII and a look at the ex-Frog tooling of the Typhoon currently being reissued by Merquaette.

For more information contact: Merv Hambling, 35 Rosebury Road, Sutfolk Park, Cramden, Norfolk, NR27 0BX

Sutton Publishing

The next title due from this publisher that may be of interest to aircraft model makers is ‘Britain’s Greatest Warship - HMS Ark Royal IV’. This title was released in the 25th March and will be packed with a mass of high quality colour photographs that I am sure many naval modellers will find of great interest. For more information contact: Sutton Publishing Ltd., Phoenix Mill, Thruflax, Stroud, Gloucestershire. GL3 2BU. Tel: 01453 731114 Fax: 01453 731117

Aviatsiya i Vremya

This Ukrainian aviation magazine offers a good selection of historical features each edition as well as big (A2) size scale plans. The edition we have, to give you some idea of the contents, includes features on the IL-2 (with good interior photographs and colour side views), the Sukhoi Su-24 (more colour side profiles), a nice little feature on early Russian aviation including things like the Morane Saulnier Type 1a, a small piece on the An-2 and a brief ‘canned-history’ of the A-3 Skywarrior. The massive set of scale plans include a full set of 1/72nd ones (including cross sections and cutaways) of the IL-4 and DB-3, plus the A-3 Skywarrior (six versions and prototype).

Copies can be obtained for £4.95 plus postage from The Aviation Bookshop (address elsewhere) and they also advise us that they have limited stocks of back issues as well.

Aero Journal

This is a relatively new publication from France that deals with all elements of aviation history. The title is bi-monthly and the last two editions (No. 4 & 5) have been passed to us by the UK source: Athena Books.

Issue 4 contains a lovely 16 page A5 size ‘Aero File’ on the Arsenal VG-33, but the remainder of the main 64 pages of the magazine include features on Stuka pilots (with colour side views of 12 Ju 88s), the history of GC I/2 (15 colour side views), female pilots in the VVS, an interesting bit on airfields in France at the end of WWII and a look at captured French types operated by the Luftwaffe (six colour side views).

The final issue in this edition is a look at the life of Ace ‘Paddy’ Finucane. Issue 5 has a feature on the ‘mystery’ of the last flight of Walter Osen, the ‘Football War’ (5 good colour side views and a number of clear photographs), more on the history of GC I/2, a feature on Oswald Bodeke, the F-4 in Vietnam, a centre spread of some 16 colour side views of Reich Defence Luftwaffe fighters, Soviet Air Force operations in WWII (four colour side views) and a nice feature on camouflage and markings which includes an interesting selection of colour artwork of various WWII aircraft.

This is a very good title, albeit all in French, and each bi-monthly edition can be obtained from Athena Books for £5.95. For more information contact them at: 34 Imperial Crescent, Town Moor, Doncaster, South Yorkshire. DN2 1BU. Tel: 01302 329913 Fax: 01302 730351

Wing Masters

This is another French title available bi-monthly via Athena Books. This title however is just about modelling (with just some historical features) and the most recent issue, No.8, has been passed to us by Athena.

This title is certainly a quality product, being 84 pages, full-colour and on high quality paper. The subjects covered in the edition include the Aichi D3A1 (Hasegawa 1/48th), Republic F-84 (Tamia 1/48th), Arsenal VG 33 & 39 (Amiet 1/72nd), Me B20 (Ibari 1/72nd) and Me 410 (Revell® 1/48th) plus a nice Diorama of a German jet 143 (Heller 1/72nd). The title also contains reviews of accessories and decals, plus books, and a selection of colour side views are usually included with one of the feature articles.

Overall a high quality product that, albeit once again all in French, can be obtained from Athena at £5.95 per issue.

Aero Fan

The latest edition in this popular Italian aviation magazine has been passed to us by the publishers.

This edition includes features on the Lohner flying boats made by Neuprotot-Macchi, sales promotions in Sweden in 1940-3, an account of an escape from Rhodes in Cant Z 506 MD45467, the DC-7 in Italian airlines service and a very interesting feature entitled April 1945 - the last days of 1st Gruppo Caccia of the ANR.

As always, the text is split into both Italian and English, with all photos also captioned in both languages. This edition is certainly full of some interesting stuff, especially all those nice close up shots of ANR aircraft at the end of WWII.

For more information on Aero Fan contact: Giorgio Apostolo Editore sel., Via Ampere 49, 20131 Milano, Italy. Tel: 02 7060073 Fax: 02 2663854 Email: info@aprostoolitore.com

News Magazine - IPMS Hellas

This magazine is produced by IPMS Hella and is published quarterly. The title deals with all elements of military and civil subjects, but tends to specialise on Greek subjects as you would expect! The edition we have has a mix of armour and aircraft subjects, including the camera fit in the Fv 190, details of the Albatros Hu-16 (including interior photographs) and a complete listing from 1912 to the present day of all aircraft types operated by the Greek Air Force and what models are available in each in most scales.

Subscriptions can be obtained for £45 by bankers draft to ‘IPMS Hellas’ at: PO. Box 79167, 175 02 Athens, Greece.
Sopwith 1½ Strutter

1/72nd SCALE

Technical Data

Manufacturer: Toko
Scale: 1/72nd
Price: £5.75
Type: Injection Moulded Plastic
Parts: Plastic 51
Decal Options: 4

Manufacturer: Toko, Experimental Industrial Technologies Plant JNT STK, Mashino, Sapporo, Hokkaido, Japan.
Tel: +81 43 287 3971
Fax: +81 43 287 3972

UK Importer: Pocketbond Ltd.
PO Box 80, Welwyn, Herts, AL6 9DD
Tel: 01707 391509  Fax: 01707 327486

The Kit(s)

Many WWI modellers have been delighted by the range of kits being produced by Toko, and I am sure that the announcement of a series of Sopwith 1½ Strutter from them was music to many an ear. Three versions will be produced by Toko and we are very privileged to have pre-production versions of the first two from Pocketbond for evaluation.

The versions we have are the trainer (Kit No. 138) and the two-seater (Kit No. 118), the only differences being the upper fuselage decking and, of course, the markings. Each kit comes on two main sprues, with the decking included for each type on a separate small sprue. The trainer comes with both types of upper decking, as an armed and unarmed option are offered on the decal sheet. The two-seater comes with the upper decking to take a Scarf ring and machine gun. The rotary engine is well proportioned and detailed, and looks as if it is designed to fit on a lug that will allow it to rotate. The cockpit interior is made up of a framework 'floor', onto which go the two seats, rudder bars and control columns. The two fuselage halves feature good fabric effect and stitching, and there is even the framework included within the cockpit area. The lower wings seem to butt-join onto each side, as no locating pins or lugs are visible. This may lead to a weak join and I am sure many modellers will pin and glue this area. The '1½ struts' that gave the type its name are well moulded and the outer wing struts include the pitot tube on the starboard seat. As already said the trainer version comes with both types of upper decking, as the model’s three decal options either have the scarf ring without the gun, with it, or with the completely different style associated with the trainer version. With the two-seater version two styles of engine cowling are also supplied, although the instructions clearly show which ones apply to each option. The same applies to the two styles of propeller included in the kit and although the bombs are used in the two-seater, they are also included with the trainer (a useful item for your spares box!).

The decals with this kit include all the national and unique markings for each option. They are well printed, matt, and have very little excess carrier film. The first option even includes the Mann #9007 flown by Lt. Raymond Collishaw of No. 3 Wing, RNAS in September 1917.

Once again the decal sheets includes all the individual and national insignia for each option and the decals are well printed and in register.

Each kit also includes a colour set of views for one of the options included on the back of the box. For the two-seater this is N5505, while the trainer is A5252.

Conclusion

It certainly looks as if Toko will surpass the existing Flashback (now Arthur) kits of this particular type and I am sure many WWI modellers will be wondering what lovely subjects Toko is going to tackle next. The answer is of course the
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