

NEW FOR 2020: BACK TO BASICS

**PART 1: TOOLS
& EQUIPMENT**

January 2020
Issue 110



Model World

TANK-BUSTING

TYPHOON

We build Airfix's
detailed 1/72
'Tiffie'

70

**REVIEWS
INSIDE**



1/48 TORNADO GR.4

1/76 LRDG DIORAMA

1/24 FERGUSON TRACTOR

SCALE MODELWORLD REPORT

LATEST NEWS AND SHOWS



HELL ON WHEELS

Gecko Model's 1/35 A10 Mk.1a CS



SEMPER VIPER

Newly tooled 1/35
AH-1Z from Academy

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[illegible]

BOX

by **MIG Jimenez**



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WELCOME TO ISSUE 110

No matter how productive I've been in my building, I always leave Scale ModelWorld inspired.

The UK's premier model show has its own distinct format that differs from similar events worldwide. Clubs and special interest groups constitute the majority of displays, while the number of new product announcements (such as Airfix's 1/72 Vulcan - see news pages) never fails to impress. For me, this 'broad church' approach is crucial to the event's success. Although there's an understandable focus on the competition, the main highlight for me is chatting with modellers from around the world about their builds and upcoming projects, even if I

can't devote as much time to this as I'd like.

My personal thanks go to the IPMS volunteers who organised this year's Scale ModelWorld, which - to my eyes, at least - was one of the smoothest running to date. Congratulations are also in order for several AMW contributors, namely Nick Shuttleworth, Richard Spreckley and Chris Jones, for their awards and commendations in the competition.

As the first magazine of a new year, you'll notice a slight 'tweak' to the contents. We'll be running a series of articles on basic modelling skills - in part, this is due to requests from current readers, but it's also aimed at new entrants to the hobby. These will

be accompanied by Back to Basics panels in certain features, such as this issue's Airfix 1/72 Typhoon Mk.Ib build, highlighting how even the most skilled builders rely on getting these aspects right.

I'm also delighted to include two builds of recently tooled offerings, namely Academy's 1/35 AH-1Z Viper and relative newcomer Gecko Models' 1/35 A10 Cruiser tank. And the Your Airfix section makes a welcome return.

I hope you enjoy this Christmas issue. Happy modelling!

Stu Fone, Editor
stuart.fone@keypublishing.com



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The average sale for the period
Jan - Dec 2018 was **13,529** print
and digital copies monthly.

C O N T E N T S

REGULARS

06 News

The latest happenings in the world of plastic modelling, with highlights from this year's Scale ModelWorld, including Airfix's newly tooled 1/72 Vulcan.

10 Give the gift that lasts all year!

A subscription to *AMW* makes a great gift this Christmas.

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- 80 Military kits
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- 86 Figures
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98 Archive Treasures

The operational delivery of Lockheed's Shooting Star 74 years ago inspired this month's photo selection.



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BACK TO BASICS

PART 1: TOOLS AND EQUIPMENT

Start your next project right, with the first instalment of this beginner's 'how-to' series from editor Stu Fone. See page 36.



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FEATURES

14 Intermediate Build - **Semper Viper**

Duncan Cooke sinks his teeth into Academy's new-tool 1/35 shark-mouthed AH-1Z Viper attack helicopter.

22 Photo Focus - **AH-1Z Viper**

All the detail a modeller could need for their Kitty Hawk or Academy AH-1Zs, courtesy of Jamie Hunter's photo walk-round of a Camp Pendleton-based machine.

24 Your Airfix - **Bf 109E**

This month's build features Paul Ward's fitting tribute to a former Airfix employee, pattern maker Pat Tranfield.

26 Intermediate Build - **Hell on Wheels**

Gecko Model's 1/35 A10 Mk.Ia CS tank is transported to Greece with a diorama and weathering job by Joe Turner.

40 Out and About - **Scale ModelWorld**

The AMW team reveals all from the annual IPMS(UK) Nationals at the Telford International Centre, which mixed incredible modelling with exciting product reveals.

44 Intermediate Build - **Pretty in Pink**

Steve Budd tests his weathering abilities on this highly enjoyable build of Heller's 1/24 Ferguson TE-20 tractor.

50 Basic Build - **Toothy Mud-mover**

Airfix's 1/72 Typhoon Mk.Ib is completed with striking artwork in this out-of-the-box build by Jamie Haggio.

56 Out and About - **Czech it Out!**

Malcolm V Lowe travels to Central Europe to sample the continental delights on show at the Czech Republic's 2019 ModellBrno show.

58 Basic Build - **Old Kit, New Tricks**

Dave Oliver applies modern painting and weathering techniques to Matchbox's classic 1970s Long Range Desert Group diorama.

64 Out and About - **Wonderful Weatherley**

IPMS Chiltern's annual show, held in Biggleswade, Cambridgeshire featured its usual warm and friendly atmosphere.

66 Advanced Build - **Swing-Wing Storm**

In this build by Chris Jones, Revell's 1/48 Tornado GR.4 receives upgrades and modifications to represent the ultimate variant of this RAF type.

Make it an **AIRFIX Model World** Christmas
See pages 10-11 for details



1983 offering. There's a complete cockpit (with upper and lower crew stations), a choice of Blue Steel missile or full bomb bay (including 21 free-fall 1,000lb bombs on accurate 'seven-carry' racks), open/closed spoilers, raised/lowered undercarriage and even

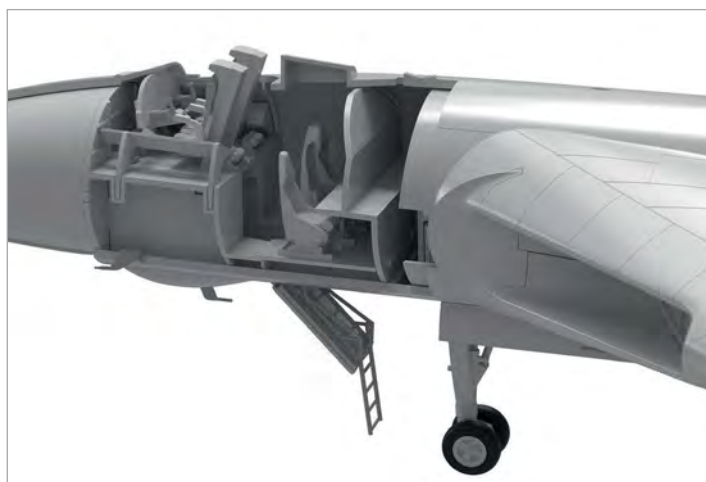
FIERY DEITY

AIRFIX'S BIG product announcement - of a newly tooled 1/72 Vulcan B.2 bomber to join its recent Valiant and Victors and complete its 'V-force' - took centre

stage on Saturday November 9, at this year's Scale ModelWorld. Just the resin prototype was on physical display on Airfix's stand, but it was accompanied by CAD

images of the parts, several of which are included below. What's apparent immediately is it's packed with detail and the mouldings are a quantum leap over the original

intake and exhaust blanks. The Vulcan (A11006) is due for release in November 2020, and AMW will feature an exclusive build in due course.



FESTIVE RESPITE

AFTER ALL the excitement at Telford with the Vulcan announcement and a busy December schedule, Airfix's January releases are fewer than in previous months, but offer just as much variety. There will be 1/72 armour and aircraft Vintage Classics, including the return of an old favourite in

the form of the Henschel Hs 123A-1, plus re-boxed 1/35 armour subjects and the re-release of the 1/400 scale Mary Rose. The month also sees the first aircraft-orientated large starter set offerings, with the 1/72 Panavia Tornado F.3 and McDonnell Douglas F-15A Eagle, both of which will come with glue, paint and brushes.



A02335V	1/76	Matilda Hedgehog Tank
A02337V	1/76	WWI Female Tank
A02051V	1/72	Henschel Hs 123A-1
A1352	1/35	Panther Ausf.G
A1353	1/35	JagdPanzer 38 tonne Hetzer 'Late Version'
A55114	1/400	Starter Set Mary Rose
A55117	1/72	Starter Set Jeep MB
A55301	1/72	Large Starter Set - Panavia Tornado F3
A55311	1/72	Large Starter Set - McDonnell Douglas F-15A Eagle

SILVER-ERA BIPLANE

UKRAINIAN FIRM Armory Models Group has released its first styrene kit, for a 1/48 Royal Naval Air Service Fairey Flycatcher and it's a little gem. This inter-war 'silver wings' naval fighter has been poorly served by kit manufacturers, but builders of quarter-scale models finally have a modern tooling of the type (48001). It comprises four styrene runners, plus an intricate resin 14-cylinder Jaguar IV engine with individual cylinders, fuel pipes and exhausts. Wire must be sourced for the valve push rods, but otherwise this is a sumptuously detailed powerplant. There's a similar level of refinement in the fuselage, with full interior



framework, while a handy rigging diagram is provided. In keeping with the time period, the schemes are colourful, with silver doped airframes wearing large red/white/blue fin flashes and roundels. Examples include

machines embarked on aircraft carriers HMS *Hermes*, *Eagle* and *Furious*, plus one airframe known to have operated from battleship HMS *Ramillies*. Visit: www.armorymodels.com for more details.

KLEINE ROCKET TANK SMASHER

DAS WERK'S line of 'what-if' Borgward IV subjects continues with a re-boxed Amusing Hobby kit of the proposed Panzerschreck-equipped anti-tank variant. It's an unusual armour offering, but the parts, presented on four styrene runners, are moulded beautifully, with no sign of flash or surface blemishes. This is a diminutive model and is ideal for builders of all skill levels, with a basic interior for the driver's position and two triple rows of launch tubes for the Panzerschreck projectiles (spare rounds and boxes are included). Schemes are supplied for



five notional machines, in varying camouflage styles – one appears to be a Soviet captured Borgward. For more information on this and other Das Werk releases, visit: www.das-werk-models.com or its UK distributor, Albion Alloys (www.albionalloys.co.uk), which is also the point of contact for modellers wanting to find their nearest stockist.

result, it offers even the most ardent detail hound everything they need for a build project, from how refuelling door panels become scratched to the position of wingtip reinforcing strips. The cockpit receives plenty of attention, with bonus annotated diagrams of pre- and post-MSIP instrument panels, plus fold-out 1/48 scale plans for F-15A/B airframes. There's even a themed bookmark. See: www.dacoproducts.com for further information.

UNDER THE FEATHERS

THE SEVENTH volume in DACO's *Uncovering* series focuses on the first two versions of the McDonnell Douglas (now Boeing) F-15A/B Eagle. Airframes in this exhaustive photo compilation have been through the Multi-Stage Improvement Program (MSIP) and changes are identified clearly. Photographs are pin-sharp, backed by informative captions. In compiling this volume, the authors were granted unprecedented access



to airframes, allowing readers to see what's inside most of the maintenance panels. As a

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TWO-UP TWO-DOWN



WORLD WAR One aviation fans have a new release to savour, with Wingnut Wings' 1/32 Hannover CL.II (Early) two-seat biplane. It featured an unusual biplane tail stabiliser - which has been replicated faithfully - and was used for escort and ground-attack missions, but its small size meant it was often mistaken for a fighter, making the

rear gunner's position particularly effective. Wingnut Wings has provided everything modellers have come to expect from the firm, with nine styrene runners supplying a wealth of beautifully moulded components (including several intended for other releases of the kit), plus a photo-etched metal fret. Three decal sheets could easily be

classed as artwork, such is their quality, with well-rendered serials and unit markings alongside large sections of lozenge camouflage. Note a disclaimer in the instruction booklet indicates the tones used are a 'best-guess', based on available information. Further details are available at: www.wingnutwings.com



CLUB SCENE

THERE'S BEEN mixed news regarding model shows for 2020, with the cancellation of one event, but the return of another to a more local venue. Unfortunately, the 2020 East Midlands Model Show has been cancelled, due to clashes with other modelling events in an increasingly busy calendar. This will be the first time in almost three decades that a show hasn't been held in Hinckley, so it's hoped a suitable date can be found in 2021 for this popular and friendly event. In happier news, IPMS Stoke-on-Trent has confirmed this year's show will take place back on more local grounds, at the Newcastle Academy in Newcastle-under-Lyme on Sunday, July 12. It will feature its usual varied collection of subjects and genres, and it would appear that cake will again be available!

MILITARY INNOVATION



LATVIAN MANUFACTURER Copper State Models has released an unusual World War One subject: a 1/35 German Romfell Panzerwagen armoured car. It's part of an impressive range concerning this vehicle type, with two versions of the British Lanchester armoured car (CSM35001 and CSM35003) and a selection of figures. Six styrene runners supply the components, including a splendid replica of the Daimler/Mercedes engine, which can be displayed if the bonnet

panels are posed open. There are also fine representations of the rear wheel drivechains and Schwarzlose MG machine gun, with the latter featuring a well-engineered mount that also serves to align the turret sub-assembly. Two schemes are supplied, although the instructions state the colours depicted are speculative, as there's no known documentation of the sole vehicle produced. More details are available at: www.copperstatemodels.com

ROCKETS, MISSILES AND BOMBS



AS IF to whet modellers' appetites, AvanteGarde Model Kits has released its 1/48 US Ordnance Set 1, in advance of its eagerly anticipated F-14D Tomcat.

While most weapons in this pack (88E01) are suitable for a late-model F-14, it also caters for other aircraft types, with rocket pods plus free-fall and guided munitions. At just £24.99, it's great value for money, including a pair of LAU-3 rocket pods, four each of GBU-31 (2,000lb) and GBU-38 (500lb) JDAM, GBU-16 (1,000lb) laser-guided bombs (LGB), LAU-68 rocket pods, AIM-9L/M Sidewinder, AIM-7M/P

Sparrow, AIM-54C Phoenix, plus 12 GBU-12 (500lb) LGBs and Mk.82 (500lb) bombs. Ancillary systems aren't neglected, with a pair each of the TARPS reconnaissance, LANTIRN targeting, Bullwinkle countermeasures and SAIP range pods. Most parts are slide moulded, and the detail is superb, with the highlight being the single-piece AIM-54s. A comprehensive decal sheet provides full stencilling, but modellers should check references regarding the yellow nose bands on bombs carried by US Navy aircraft. More on this and other AMK releases is at: www.amkhobby.com

FLYING TENT PEG

LOCKHEED'S STARFIGHTER continues to be popular with aircraft modellers, and Kinetic Model Kits has released a newly tooled 1/48 F-104Gs. Although there are several offerings of the type available, this all-new moulding (K48083) features arguably superior external detail, including finely engraved panel lines across all external surfaces. Similarly impressive raised interior fittings adorn the 14-piece cockpit sub-assembly and the main undercarriage bays. There are options provided for raised/lowered flaps, open/closed canopy and wingtip fuel tanks/missile launchers (just two AIM-9 Sidewinders are supplied), depending on which of the five schemes is chosen.



The Cartograf-printed decal sheet includes markings for four Luftwaffe airframes from Jagdbombergeschwader 34 'Allgäu', based at Memmingen, Germany between 1984-87, and a Marinefliegergeschwader 2 machine at Eggebek, 1985.

Surprisingly, there is no air-to-ground weaponry included, despite the ground-attack and maritime-strike roles of the specified units. More information on this and other Kinetic releases is at www.kineticmodel.com

HERCULEAN IMAGERY

THE NINTH addition to HMH Publication's Duke Hawkins photographic reference books is dedicated to the Lockheed-Martin C-130 Hercules. Its 194 pages mean this is the longest publication in the series, and a publisher's note denotes the volume's growth over its production, such was the subject's popularity. The first chapter forms a useful guide to the types covered – predominantly those still in service or recently retired.

From there, the photos depict all aspects of this aircraft, with exceptional views of the fuselage, wings, powerplants



and landing gear, plus shots depicting the loading ramp, cargo bay and cockpit. It also manages to convey the broad range of roles the type has undertaken, with sections dedicated to communications/jamming, gunship, tanker and special forces variants. Last, in-service photos depict a range of airframes, including American, British, Moroccan and Belgian machines. Visit www.hmh-publications.com for more information.

SHUTTLEWORTH SPECIAL

DORA WINGS' 1/72 Westland Lysander is a newly tooled kit representing the type as modified for covert operations, with airframes receiving the designation SD (Special Duties). It's a comprehensive boxing (DW 72023), containing six styrene runners, resin and photo-etched metal components, plus a set of paint masks – particularly useful for the type's large glazed section. The interior has a representation of the cockpit framework, onto which seating and controls are attached, and this detail will be clearly visible. There's also an option provided for an open canopy

top. Specialised fittings for the SD role are represented neatly, with the ventral drop tank being a four-part assembly and the ladder a PE addition. A choice of three RAF markings

is provided, including the matt black scheme of 161 Sqn's V9367/MA-B, currently worn by the Shuttleworth Collection's operational example. Visit www.dorawings.com for more details.



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04952 Airbus A321neo, 1:144

LEVEL 5

03863 Heinkel He111 H-6, 1:48

LEVEL 4

New Parts

05688 Gift Set - Spitfire Mk. IIa 'Iron Maiden', 1:32

LEVEL 4

03879 F-104 G Starfighter RAAF/BAF, 1:72

LEVEL 4

New Parts

05165 Patrol Torpedo Boat PT-579/PT-588, 1:72

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SHOW SCENE

At-a-glance model show calendar

KEY	MODEL DISPLAY	AIRCRAFT DISPLAY	REFRESHMENTS
	MODEL COMPETITION	MILITARY DISPLAY	FREE PARKING
	TRADE STANDS	AUTOMOTIVE DISPLAY	MAKE 'N' PAINT



Halifax Model Show 2020

Date:	February 16, 2020
Hosts:	IPMS Wakefield and District
Address:	North Bridge Leisure Centre, North Bridge Street, Halifax HX3 6TE
Times:	10am-4pm
Prices:	Adults £4, concessions £3
Email:	huddersfieldshow@gmail.com
Web:	www.huddersfieldscalemodelshow.co.uk



January

5 Croydon Aviation Fair 2020

Hosts: Dave Sutton
Address: Hallmark Hotel Croydon Aerodrome, 680 Purley Way, Croydon, Surrey CR9 4LT
Times: 10:30am-5pm
Prices: £4
Email: davidsutton16@aol.com
Web: www.aviationantiques.co.uk



19 Bolton IPMS Scale Model Show

Hosts: Bolton IPMS
Address: The Premier Suite, University of Bolton Stadium, De Havilland Way, Bolton BL6 6SF
Times: 10am-4pm
Prices: Adults £5, concessions £3, family (2 adults + 2 children) £12
Email: hawksig@gmail.com
Web: www.ipmsbolton.co.uk



26 Model Market 7

Hosts: HaMex
Address: Hanslope Village Hall, Newport Rd, Hanslope MK19 7NZ
Times: 10am-4pm
Prices: Adults £2, under 16s free
Email: info@hamex.co.uk
Web: www.hamex.co.uk



February

1 North Surrey Military Modelling Group Open Day

Hosts: North Surrey Military Modelling Group
Address: Banstead Community Hall, Park Road, Banstead, Surrey SM7 3AJ
Times: 10am-4pm
Prices: Adults £3, concessions £2, children £2
Email: membership@nsmmg.org.uk
Web: www.nsmmg.org.uk



15-16 Southwest Model Show - Spring Edition

Hosts: The Tank Museum
Address: The Tank Museum, Bovington, Dorset BH20 6JG
Times: Sat 10am-5pm, Sun 10am-5pm
Prices: Adults £14, children £9, under 5s free
Email: info@tankmuseum.org
Web: www.tankmuseum.org



15-16 Hamburger Tactica 2020

Hosts: Hamburger Tactica
Address: Bürgerhaus Wilhelmsburg, Mengestraße 20, 21107 Hamburg, Germany
Times: Sat 10am-7pm, Sun 9am-4pm
Prices: Sat €7, Sun €5, under 10s free
Email: tactica@hamburger-tactica.de
Web: www.hamburger-tactica.de



22 On Track Military Modelling Show

Hosts: On Track Shows
Address: The Leas Cliff Hall, Folkestone, Kent CT20 2DZ
Times: 10am-5pm
Prices: Adults £5, under 16s free
Email: on.track@live.co.uk
Web: www.ontrackshow.co.uk



22-23 17th Model Show

Hosts: L'Association des Maquettistes du Montpelliérain
Address: Salle Bleue, Avenue de l'Abbé Brocardi, 34250 Palavas les Flots, France
Times: Sat 9.30am-7pm, Sun 9am-6pm
Prices: Adults €6, concessions €3, under 10s free
Email: amm34000@aol.com
Web: www.amm34.com



23 South Cheshire Militaire - Universal Model Show

Hosts: South Cheshire Military Modelling Club (IPMS)
Address: Malbank 6th Form College, Welsh Row, Nantwich, Cheshire CW5 5HD
Times: 10am-4pm
Prices: Adults £4, concessions £3, adults (under 16) £2
Email: morris_sj@live.co.uk
Web: www.scmmc.co.uk



March

1 East of England Model Show 2020

Hosts: Peterborough Scale Model Club
Address: Queen Katherine Academy, Mountstevens Avenue, Walton, Peterborough PE4 6HX
Times: 10am-4pm
Prices: Adults £3, under 15s free
Email: peterboroughscalemodelclub-show@outlook.com
Web: peterboroughscalemodels.co.uk



7 Aldingbourne Modellex 2020

Hosts: Aldingbourne Modellers IPMS
Address: Aldingbourne Community Sports Centre, Olivers Meadow, Westergate, Chichester, West Sussex PO20 3YA
Times: 10am-4pm
Prices: Adults £2.50, under 16s free
Email: Aldingbournemodellers@gmail.com
Web: Aldingbourne Modellers (Facebook)



15 Fantazmagoria 2020

Hosts: Film & TV Model Club
Address: Oakleaf Sports Complex, School Aycliffe Lane, Newton Aycliffe DL5 6QZ
Times: 10am-4pm
Prices: Adults £2, under 14s free
Email: ah.ftvmc@gmail.com
Web: FantazMagoria 2020 (Facebook)



IMPORTANT: It is worth noting that ALL events are subject to change or cancellation. This information has been collated from a variety of sources and was believed to be correct at the time of going to press. To advertise your event here, email: stuart.fone@keypublishing.com

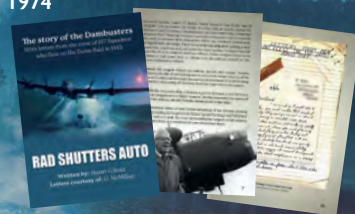
HK Models Avro Lancaster B Mk. III Dambuster

Designed and built by AV Roe & Co, powered by four Rolls-Royce Merlin engines, the Lancaster began operations in March 1942 and with its superior speed, height and range was the most efficient RAF bomber of the Second World War. The Lancaster was chosen to equip 617 Squadron and was modified to carry the Upkeep bouncing bomb designed by Barnes Wallis for Operation Chastise.

PKHK01E11
AVRO LANCASTER B MK III
DAMBUSTER ED932/AJ-G

What's in the box?

- New tooled parts for Upkeep bouncing bomb used in Operation Chastise dam raid in May 1943
- Markings for Lancaster B Mk III Special ED932/AJ-G of 617 Squadron RAF Scampton
- Exclusive UK edition includes new booklet written specially for the new Dambusters kit combining "Rad Shuttles Auto" by Squadron Leader Stuart G Reid BSc RAF (Retired), Pilot Royal Air Force Battle of Britain Memorial Flight, Lancaster PA474 1999-2010 with "Letters from men who flew on the Dams Raid in 1943" written in 1974



1:32 Scale • Length: 664mm • Width: 972mm • Total parts: 854

HK Models B-17G Flying Fortress Early Production

For a long long time, a new state of the art model kit of the B-17 Flying Fortress in 1/48th scale has been high on modellers' wish lists. Enter Hong Kong Models with a brand new 1/48 B-17G, their first quarter scale kit! The new "Fort" will feature the same ease of assembly, fine surface and interior detail, clever engineering, great markings and fantastic box art as HKM's larger 1/32 scale kits. With a wingspan of approx 66cm (26in) the 1/48 Fortress is a large and impressive model.

PKHK01F001
B-17G FLYING FORTRESS
EARLY PRODUCTION

Includes markings for
2 USAF aircraft:

Option 1:	Option 2:
B-17G-15B0	B-17G-40-VE
Queenie	American Beauty
s/n 42-31353	s/n 42-98008
LG-Q	2S-G
322 nd BS / 91 st BG	834 th BS / 486 th BG,
Bassingbourn UK,	Sudbury UK
Spring 1944	Late Summer 1944

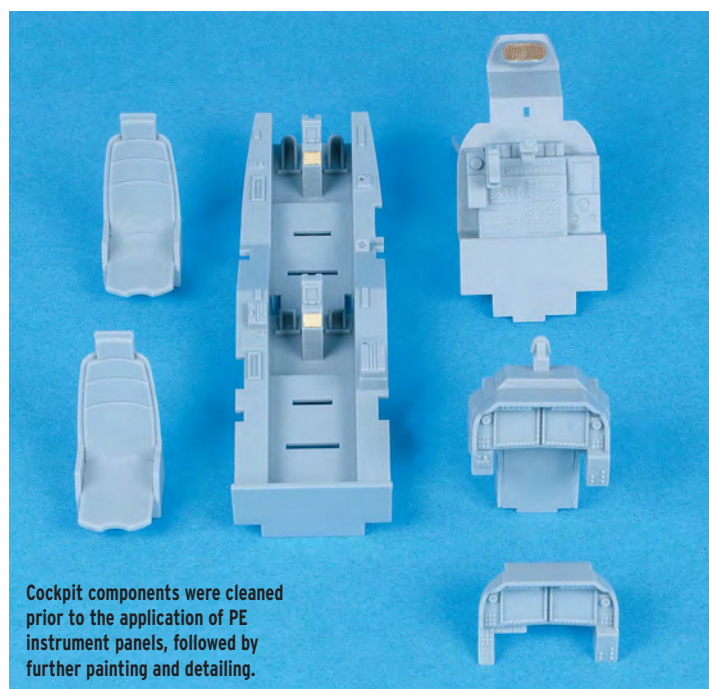
1:48 Scale • Length: 474mm • Width: 658mm • Total parts: 254

Duncan Cooke builds Academy's newly tooled 1/35 AH-1Z Viper attack helicopter as a shark-mouth adorned airframe

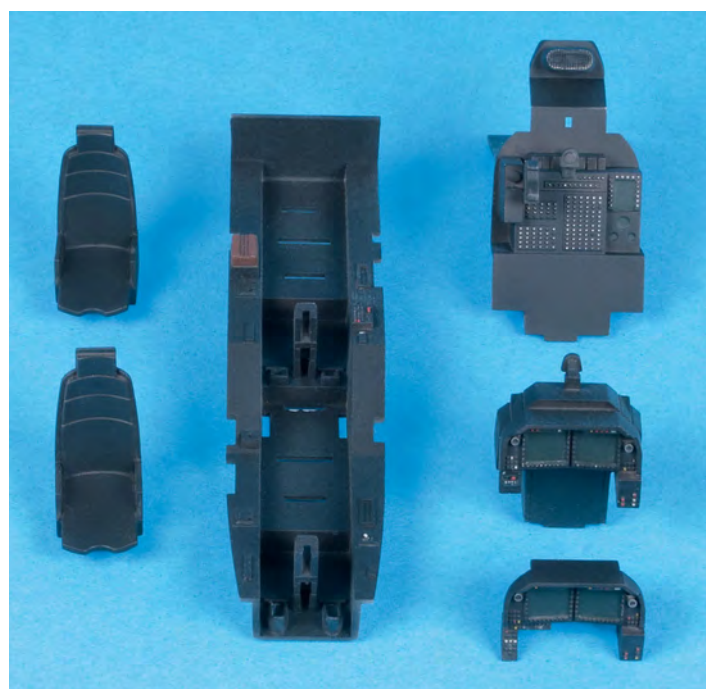
Bell Helicopters' AH-1Z Viper is based upon the AH-1W Super Cobra, developed originally for the United States Marine Corps (USMC) as part of the H-1 helicopter upgrade programme. With a four-blade, bearingless composite main rotor assembly, uprated transmission and a new targeting system, the AH-1Z is the latest member of the infamous 'Huey' family and is also referred to as the 'Zulu Cobra' in military circles. The AH-1Z made its first flight on December 8, 2000 with a final operational declaration being made by the USMC in September 2010. Full-scale production was approved in December 2010, with the Marines planning to receive a total of 189 Vipers until 2022. These include 131 AH-1W upgraded into AH-1Z and

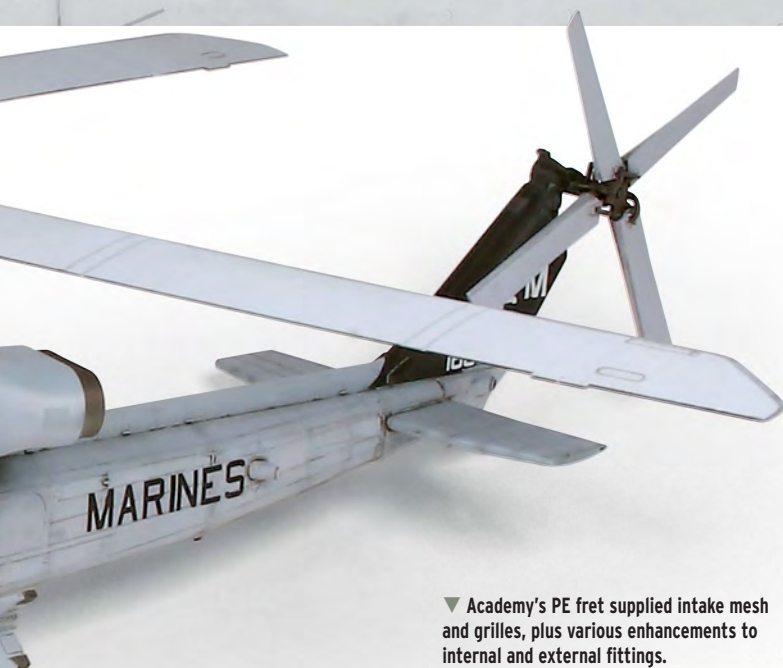


SEMPER VIPER



Cockpit components were cleaned prior to the application of PE instrument panels, followed by further painting and detailing.



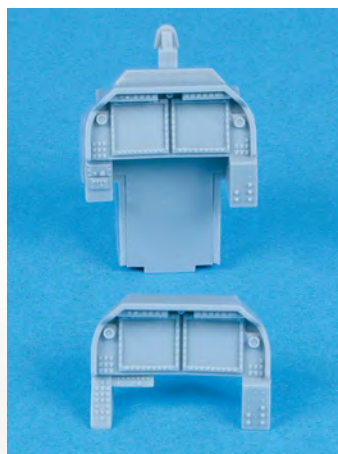
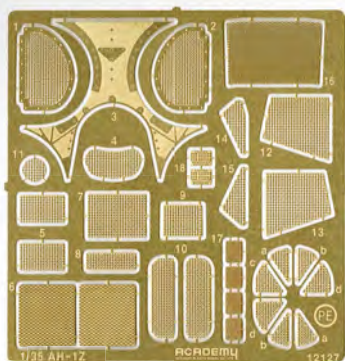


58 new-build airframes, priced at US\$27-31m each. In early 2019 it was confirmed 12 further examples of the type would be supplied to Bahrain as part of a US\$911.4m contract to include weaponry and related equipment.

First impressions

Academy's 1/35 AH-1Z is one of those rare kits that produced a "wow" upon opening; the use of slide-moulding was quite evident with the presentation of the exquisite and perfectly formed hollow tail boom and stub-wing sections. A comprehensive selection of weapons was also

▼ Academy's PE fret supplied intake mesh and grilles, plus various enhancements to internal and external fittings.



▲ Moulded detail for the Multi-Function Displays was excellent, with little clean-up required. Refinement came with the addition of PE.



▲ A mix of Humbrol 2 Gloss Green and 33 Matt Black created a 'powered down' representation on the MFDs. Switches were picked out by hand-painting and dry-brushing.



supplied, plus a photo-etched (PE) metal fret, which provided intake mesh and some internal/external surface detail enhancements. The inclusion of pre-cut self-adhesive painting masks was a welcome touch, as rotary wing aircraft typically feature extensive and often complex glazing panels. ▶

MODEL SPEC

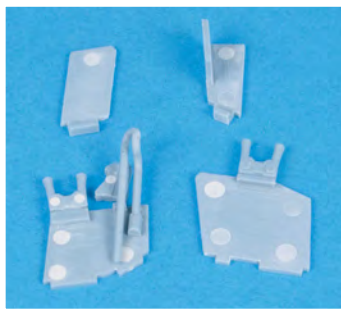
USMC AH-1Z 'Shark Mouth'

By:	Academy
Stock Code:	12127
Scale:	1/35
Price:	£39.99

Available from:

www.pocketbond.co.uk





▲ Academy suggested 3g (0.11oz) should be added to each side panel – a White Tack 'worm' enclosed Deluxe Material's Liquid Gravity and was set with PVA glue.

◀ Cockpit side panels and associated components required several ejector pin marks to be removed prior to painting.



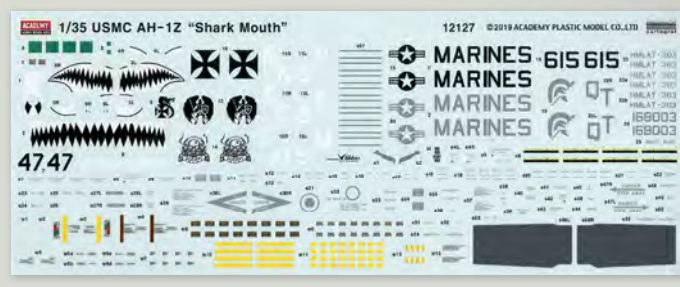
▲ Clever engineering ensured the fuselage halves closed snugly around the cockpit, while the combined lower panel and undercarriage skids sub-assembly fitted perfectly.



KIT SCHEMES

A comprehensive decal sheet was included, covering four Vipers, plus full airframe and weapons stencilling. The choices were:

- 168961/47/SN, HMLA-169 'Vipers', Iwakuni, Japan, 2017
- 168961/47/SM, HMLA-369 'Gunfighters', Iwakuni, Japan, April 2018
- 168961/47/SE, HMLA-469 'Vengeance', Itazuke, Japan, August 2018
- 168003/615/QT, HMLAT-303 'Atlas', Paris Air Show, Paris-le Bourget, France, 2011



Two comprehensive instruction manuals were included, with one dedicated to the build process and the other (in full colour) detailing the optional paint schemes, plus the PE, decal and paint mask placement.

The office

As is typical with rotary wing aircraft in this scale, the build started with the cockpit. Pilot and gunner instrument panels were constructed separately and added to a common 'tub' together with the seats, flight controls and side panels. Optional PE or decal enhancements were offered for extra detail; the former was selected as it provided a 3D surface, which would receive a highlighting wash to give a convincing appearance.

Mr. Paint's MRP-084 Fine Surface Primer Gray (www.mrpaint.sk) was used as a base coat, followed by several thin applications of



MRP-077 NATO Black. This was preferred to the Flat Black called out in the instructions, as modern cockpits are rarely finished in this shade. Multi-Function Display (MFD) panel decals were included, but they appeared a little too bright, so Humbrol's 2 Gloss Green (www.humbrol.com) was mixed with 33 Matt Black and used to create a realistic 'powered down' representation. Switch detail was picked out by a combination of detailed hand-painting and dry-

brushing with 64 Light Grey. A covering coat of Johnson's Klear floor polish resulted in a gloss base, over which AMMO-MIG's A.MIG-1602 Deep Grey Panel Line Wash (www.migjimenez.com) was applied. This subtly accentuated the remainder of the cockpit switch detail and muted some of the more exuberant hand-painting. At this point, a few strategic cockpit data placards were taken from the excellent Airscale Modern Jets Dataplate and Warning

Decals sheet (www.airscale.co.uk). Although this sheet (found in the spares box) was a 1/32 scale product, the options were plentiful, so something suitable for 1/35 would almost certainly be found to match references.

A diluted mix of Vallejo's 28.531 Acrylic Matt Varnish (www.creativemodels.co.uk) was sprayed to seal and 'flatten' all surfaces, while 28.532 Acrylic Satin was brush-painted on to the MFDs to provide a more natural appearance

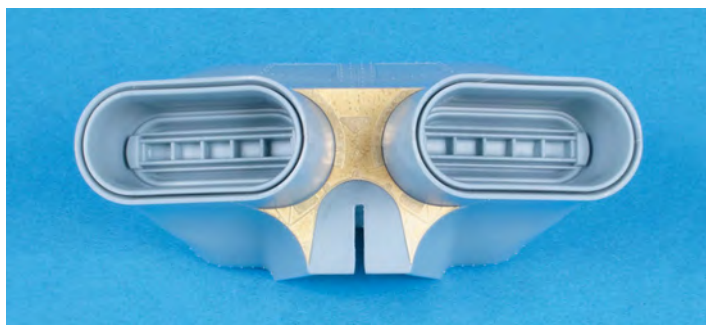
against the overall NATO Black. Attention then turned to the main fuselage sections, which enclosed the pre-built cockpit assembly.

Weight gain

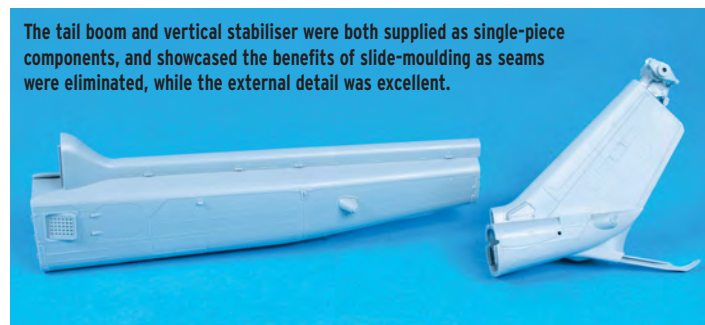
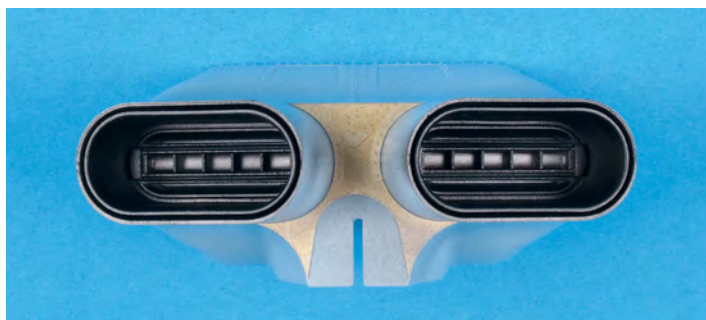
Among the notable features of the main fuselage components was a clever inclusion of additional runner braces for the rear engine/exhaust area. This ensured any undue flex and potential distortion was minimised. These were left in place until the last possible stage, then removed carefully using a RB Productions Nano Saw (www.radubstore.com).

There were two options for the nose-mounted targeting/optical/infrared sensor dome, which featured a choice of solid or clear parts. The former was selected for this build, with a view to providing a mirrored backing for the lenses via a Molotow 703101 1mm Liquid Chrome pen (<https://shop.molotow.com>).

It was noted that 3g (1/10oz) of nose weight should be secured in the forward panel recesses. Instructions suggested just one side should contain the weight, but no chances were taken and ballast was included in both, using a white tack 'worm' enclosing Deluxe Materials Liquid Gravity (www.deluxematerials.com), and set in PVA (white) glue. Subsequently it was discovered this was



▲▼ The exhaust assembly comprised two designed parts plus detail inserts, while an optional PE facing provided enhanced surface features.



The tail boom and vertical stabiliser were both supplied as single-piece components, and showcased the benefits of slide-moulding as seams were eliminated, while the external detail was excellent.

▼ Horizontal stabilisers fitted over the join between the two major tail components, which served both to detract from the seam and to reinforce this area.



**"AN IMPRESSIVE
FEATURE WAS
THE VARIETY
OF WEAPONS
PROVIDED"**



exceptional, with just the slightest pressure (from a finger) required to align components. Once dry, the resulting seam was minimal, blending with the riveted panel lines. Fuselage body detail, the main engine intakes and covers were fitted in front of and over the previously painted turbine faces. Internal surfaces on other airframe intakes/vents were also painted before installation - having these enclosed was a clever touch, as such items are typically left open to the fuselage interior.

The exhaust assembly comprised two well-fitting parts with separate detail inserts; an optional PE facing was provided, which enhanced the surface around them.

Internal exhausts received ALC-112 Steel, ALC-123 Engine Manifold and ALC-113 Jet Exhaust, but were left out until after the final topcoat to avoid complicated masking and/or a messy touch-up.

Other than three small tabs, there was little to assist in the mating of the completed exhaust assembly with the main fuselage,

marginal in terms of balance once the skids were fitted - 5g (1/6oz) would have been better - but for future builds, there was scope beneath the chin-mounted gun assembly to add more if required.

The fuselage halves were then mated and, despite the inclusion of items in the middle of the 'sandwich', including the support for the main rotor, a detail panel for the engine cooling intake and the turbine blades, the fit was excellent. All were pre-painted prior to installation with Alclad's ALC-112 Steel (www.alclad2.com) as the base and ALC-123 Engine

Manifold and ALC-113 Jet Exhaust used for tonal variance. A sparing application of A.MIG-1611 Night Black Panel Line Wash highlighted the detail.

Neatening the fuselage seam required minimal effort - merely a scrape with a new scalpel blade and a smear of Mr. Surfacer 500 (www.albionhobbies.com), cleaned using a Mr. Color Thinner-dampened Tamiya Swab (www.hobbyco.net).

Powering through

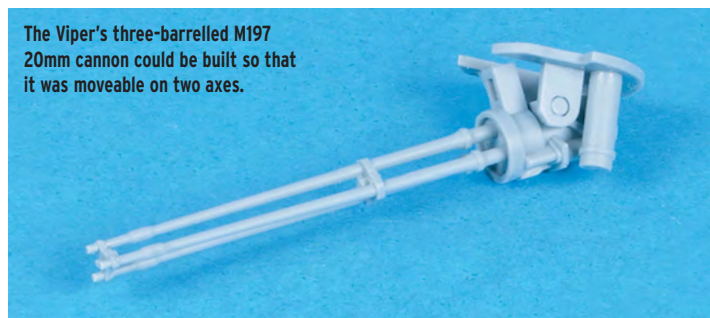
Next, the underside panel and skids could be added. These formed a single sub-assembly and the fit was

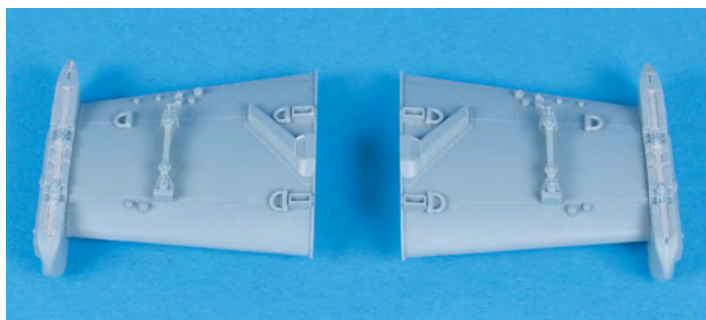
VIPER'S NEST

Werner's Wings (www.wernerswings.com) has released a superb three-sheet package, AH-1Z Viper Attack (WW Decals 35-10) for Academy's 1/35 kit, with markings for 16 machines. Full airframe stencils are provided, with specific items shaded to match the associated camouflage scheme on each side of the aircraft - these include alternative items for 'hard' or 'soft' demarcations. Serials and coloured markings for specific helicopters are supplied, as are items for fuselage details, with all decals showing strong opacity and tonal register. Side profiles and reference information are provided for each option and this set is priced at US\$25 (it's also available in 1/48 scale as 48-17). The schemes are:

- 166759/005/DD, VX-31 'Dust Devils', China Lake, California, USA, October 2007
- 166479/44/XE, VX-9 'Vampires', May 2006
- 168799/55/UV, HMLA-267, 2017
- 168520/634/QT, HMLAT-303, March 2016
- 168525/25/VT, HMLA-367 'Scarface', Kane'ohe Bay, Hawaii, May 2018
- 166759/42/MV, VMX-1, Yuma Air Show, Yuma, Arizona, USA, March 2019
- 168807/25/TV, HMLA-167, New River, New Carolina, USA, November 2018
- 168420/45/SE, HMLA-469, Camp Pendleton, California, USA, May 2018
- 168420/45/SM, HMLA-369, Camp Pendleton, California, USA
- 168398/45/SN, HMLA-169, Camp Pendleton, California, USA, October 2013
- 168519/43/YP, VMM-163 (REIN)
- 167809/41/YO, HMM-268 (REIN), USS *Makin Island*
- 168398/44/PF, HMM364 (REIN), Djibouti, 2013
- 168523/44/YR, VMM-161 (REIN)
- 168050/46/YX, VMM-166 (REIN), Bahrain Airshow, Sakhir, Bahrain, January 2014
- 169088/40/YX, VMM-166 (REIN)

The Viper's three-barrelled M197 20mm cannon could be built so that it was moveable on two axes.





▲ Additional detail was added to the lower surfaces of the stub wings before attaching them to the fuselage.



▲ Reinstatement of raised detail removed by over-zealous sanding was achieved with Archer Fine Transfer resin rivet decals.

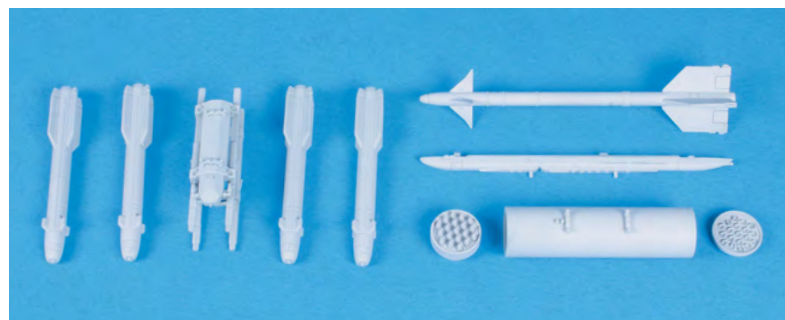
but they joined snugly. Minimal sanding was required to blend the seam, but this activity did result in the removal of some moulded rivet detail. The preferred method of reinstatement was the use of Archer Fine Transfer's resin decals taken from sheet AR88001 (www.archertransfers.com). These were cut in a continuous length, applied to the seam and seated with Microscale's Micro Set and Micro Sol (www.microscale.com) as necessary. They were almost undetectable under a coat of primer, were most convincing and matched the moulded representations very well.

Rear end

The detail on both the slide-moulded hollow tail boom and vertical stabiliser was exceptional, so care was taken to keep sanding to a minimum to preserve

as much as possible. The tail rotor assembly was constructed separately and fitted snugly, while the horizontal stabilisers were fitted over the join between the two major components. This was a clever engineering idea, as it served both to detract from the seam and reinforce the structure. Milliput White Putty (www.milliput.com) and a Flex-i-File (www.albionhobbies.com) were used to balance a slight step in the plastic on the spine, but this was the only such issue noted.

Once completed, the tail boom assembly was mated to the rest of the airframe. Although dry-fitting proved the alignment between



▲ A comprehensive selection of armament loadout options was provided, including AGM-114 Hellfires (left), AIM-9L/M Sidewinders (upper) and 19-shot rocket pods (lower).

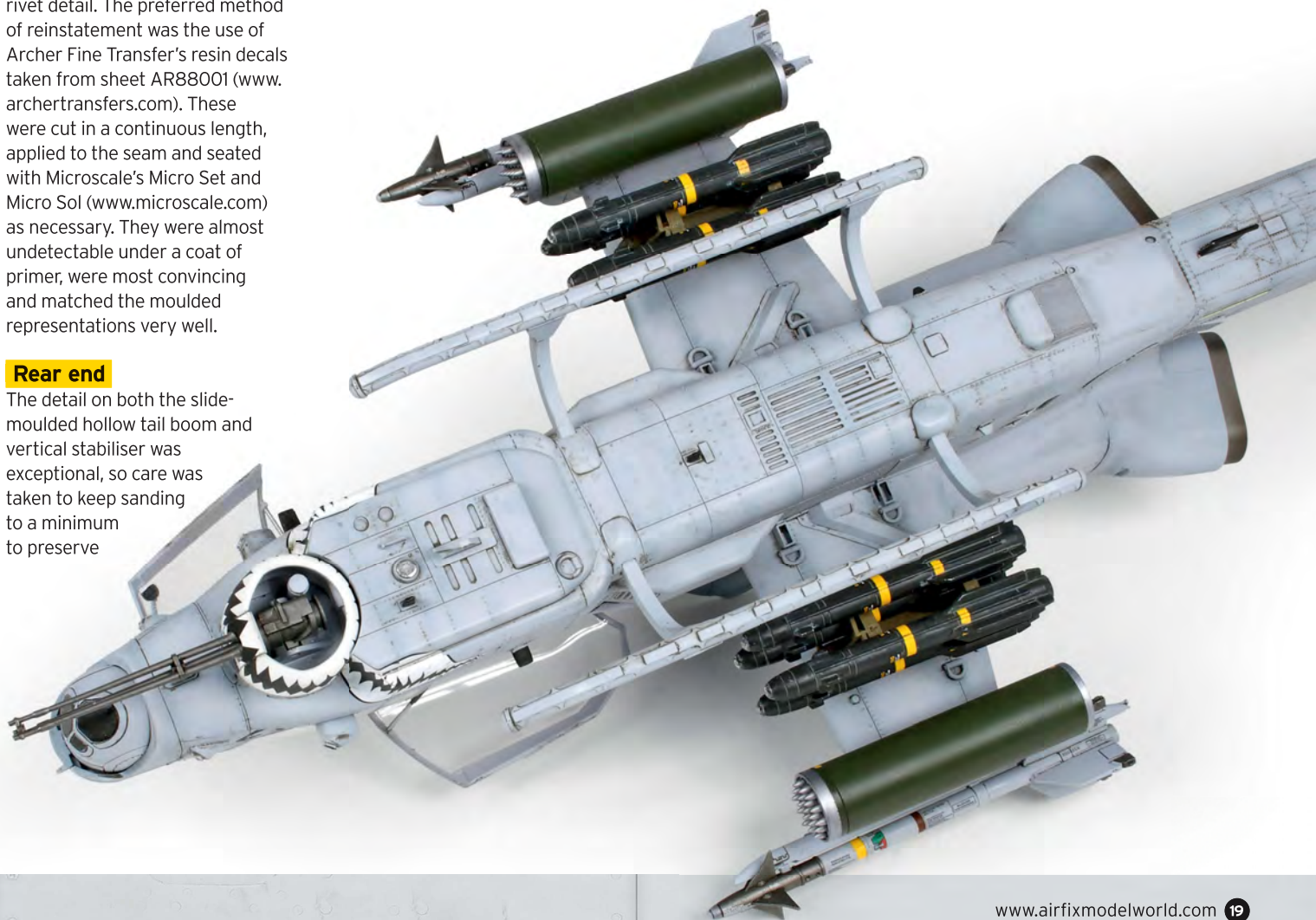
these modules was good, a small bracing spar (made from spare runner) was added to ensure even spacing between the fuselage halves at the seam. This made for an easier final join that required little more than couple of Tamiya Tape strips to hold it in place while the adhesive dried.

At this point the PE surface detail was added; this consisted mostly of mesh to cover the various intakes around the fuselage. As curved sections were required for the leading edge of the vertical stabiliser and upper engine cover, these were shaped using an RP Toolz Conical Roller Tool (www.rptoolz.com). This is a useful device

which allows both even curves and conical shapes to be formed from flat PE sections.

"If you ain't ordnance"

An impressive feature was the variety of weapons provided straight from the box, plus the detail with which it was presented. The Viper's three-barrelled M197 20mm cannon was built into a nose-mounted rotating housing - with a little care during assembly and painting, this could be constructed in such a manner as to allow it to be moveable. Options were provided for seven-shot LAU-68 or 19-shot LAU-61 rocket pods, which could be built in





With the fuselage assembly all but completed, surface detail was enhanced via PE items - at this stage the model was awaiting canopy glazing prior to the first primer coat.



Pre-shading with MRP-077 NATO Black disrupted the plain, unnatural finish that can often result from grey schemes - in this instance MRP-097 FS 36320 US Dark Ghost Gray/MRP-038 FS 36375 Light Gray.

loaded/unloaded configuration by simply replacing the launcher endcaps. A full complement of eight AGM-114 Hellfire missiles were also available, plus an M299

quadruple launcher and two AIM-9 Sidewinder air-to-air missiles (with associated LAU-7 rails) could be attached to the stub wing endpoints. Extensive stencil decals

were provided for all the armament options, so a quick check of the available airframe references yielded all that was necessary to finalise the correct selection.

To fit the AIM-9s, the mounting



pinholes must be opened in the respective endpoints before they can be attached. At this stage, a slight deviation from the instructions meant the stub wing assemblies and associated detailing, were affixed to the main fuselage before adding the armament. This allowed for a more

consistent approach to the overall paint finish, without the need for complicated masking.

Spinning around

Assembly of the main rotor involved producing 'half-clamps', together with the main hub, into which the blades were attached - note these are handed and feature two different mounting slot arrangements - this modeller sat confused for a while until this variance was understood. With the correct parts matched and dry-fitted, the orientations were marked with a pen as a reminder. Tail boom rotor blades were moulded individually, so care should be taken to ensure the correct length of actuator rod is attached to the appropriate blade, otherwise the finished assembly won't join with the hub correctly. Both main and tail boom rotors were masked via AK Interactive's tape (www.ak-interactive.com) to allow the blade leading edges to be finished in ALC-115 Stainless Steel. Note, AK's tape seems to have less tack/stickiness than Tamiya's and did not pull at the paint when being removed - particularly useful when fine detail was masked.

Marine greys

Before applying the first overall coat of MRP-084 Fine Surface Primer (Gray), it was decided to fix the canopy transparencies in place temporarily. This was after they had been dipped in Johnson's Klear to maintain their clarity and been covered with the supplied pre-cut masks. White Tack was used to hold the glazing in position during painting, before they were

ONLINE REFERENCES

Bell Helicopters
(www.bellhelicopter.com)
General AH-1Z

Global Security
(www.globalsecurity.org)
AH-1 Variants

Helicopter History Site
(www.helis.com)
AH-1Z Viper Database

Military Factory
(www.militaryfactory.com)
AH-1Z Viper Cockpit



posed open for display.

Pre-shading with MRP-077 NATO Black served to break up the bland finish that can often result from two-tone grey schemes, in this instance MRP-097 US Dark Ghost Gray FS 36320 over MRP-038 Light Gray FS 36375. This was enhanced further with an A.MIG-1602 Deep Grey Panel Line Wash to create a subtle and irregular pattern.

A coat of Klear provided the base for the Cartograph-printed decals. These were of exceptional quality, being thin and in perfect register. This was particularly evident with the shark-mouth, which comprised several items that fitted together without issue. Once sealed with a further coat of Klear, an overall wash of A.MIG-1602 was applied, with specific detail picked out using either A.MIG-1601 Medium Grey or A.MIG-1611 Black Night Panel Line Washes as required. This provided enough contrast to highlight the moulded surface detail without overpowering the finished scheme. A topcoat of 28.531 Acrylic Matt Varnish used to flatten the general appearance, after which this very enjoyable build was concluded.

On the stand

Academy has excelled with its 1/35 AH-1Z 'Shark Mouth' - it's reasonably priced with exquisite slide-moulded components, excellent surface detail and fit. Hence it comes highly recommended and makes a compelling addition to the increasing number of 1/35 rotary wing subjects. With Eduard (www.eduard.com) releasing additional PE detail sets and associated masks, another example may well find its way on to the workbench very soon.



▲ Application of an overall A.MIG-1602 Deep Grey Panel Line Wash resulted in a subtle and slightly irregular pattern to the final finish; here the excess has yet to be removed.



▲ Extensive stencil data decals were provided for all munitions, while clear seeker heads were supplied for the AGM-114 Hellfire missiles.

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▲ Viewed from the side, the Viper is similar to late-generation AH-1Ws with Hover Infrared Suppression System (HIRSS) exhausts. The four-bladed rotor and beefed-up airframe and stub wings are readily apparent.



▲ The pilot is equipped with a helmet-mounted display (including monocular targeting sight) and a combat survival waistcoat – the crew sit in crash-resistant seats – circuit breakers are mounted to the side, along with ducting for the cabin air conditioning system.



▲ The overlapping 'x-configuration' tail rotor is very noticeable in this close-up of the vertical stabiliser, along with the associated control wiring. Note the low-viz formation 'slime light' on the fin and a missile-warning sensor (bottom centre) on the tail boom.

VIPER STRIKE

Combat Aircraft editor Jamie Hunter provides modellers with inspiration for their Kitty Hawk or Academy AH-1Z projects with a selection of walk-round photos, taken at Marine Corps Base Camp Pendleton in 2016.

With all flight checks completed, 168517 readies for take-off. It is carrying a single 19-shot 2.75in (70mm) Hydra 70 rocket pod and empty LAU-7 pylons for AIM-9M Sidewinder air-to-air missiles.





► This view, as the pilot makes his pre-flight checks, highlights the splayed horizontal exhaust diffusers that form part of HIRSS, which is a key element of the AH-1Z's passive countermeasures against heat-seeking surface-to-air missiles.

▼ Another view of the cockpit and forward fuselage highlights the attitude sensors (immediately in front of the windscreen) and empty chaff/flare opening (below the national insignia). Note the prominent rivets on the various panels.



▲ Up-close and personal: the business end of the Viper houses a three-barrelled M196 20mm cannon, with the type's electro-optical and infrared targeting/surveillance sensors in the 'dome' immediately above it. Also visible are the forward defensive aids sensors.



YOUR AIRFIX



Paul Ward builds a tribute to an old Airfix employee using the firm's 1/24 Bf 190E



As teenager back in 1977, I was obsessed with model aircraft kits and saved enough money to buy Airfix's magnificent 1/24 Stuka. Many years later, I made friends with the son of Pat Tranfield, the pattern maker for the Ju 87, plus the early Bf 190, Fw 190, Harrier and Mosquito offerings. This build depicting a Bf 109E-4 of II./JG 3 based in France during 1940 was my tribute to Pat.

Additions included scratch-built wheel wells, Eduard seatbelts and a Yahu instrument panel. Issues were encountered when fitting the cowlings - remedied using

additional styrene strip and adjustments to the gun sights - and the instrument panel needed lowering to fit under the canopy. Painting employed a mix of Tamiya, Vallejo and AK Interactive hues, while weathering was courtesy of Flory washes, AMMO-MIG products and oil paints. Montex masks were employed to produce insignia - their semi-transparent nature aided alignment and made the process easy, despite this being a first attempt at using them.

An interesting article concerning this model came from Pat himself in a 1980s modelling magazine, where he described the process of producing a model pattern during that era in a workshop full of traditional tools, without a computer in sight.



CONTACT US

Are you proud of a particular Airfix build? Then let AMW know by providing us with 150-200 words on the project and what was involved, along with 6-8 good quality photos against a clean white background. Photo file sizes should be 1MB or larger. Please e-mail your submissions to the editor: stuart.fone@keypublishing.com



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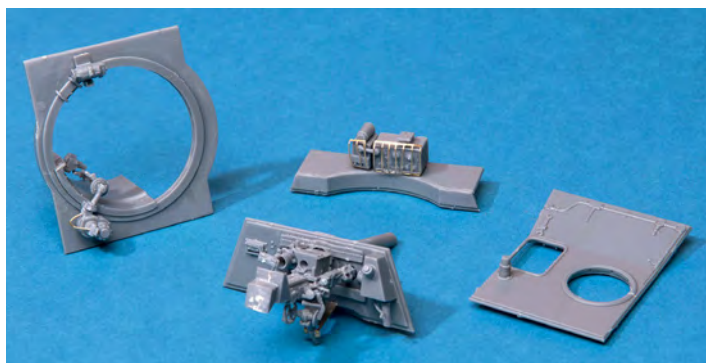
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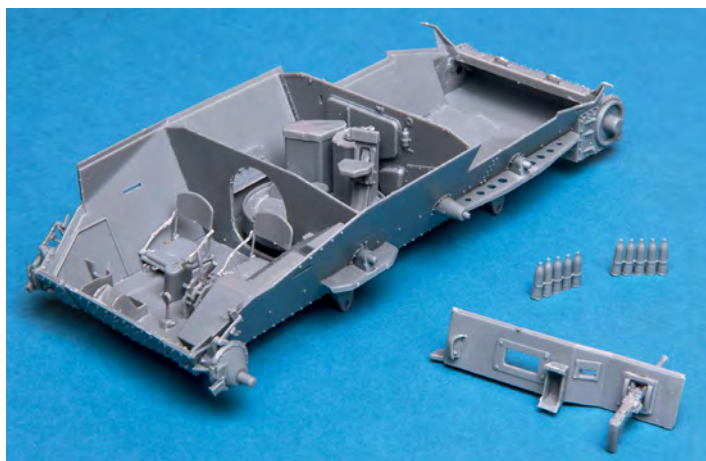
Joe Turner dusts down a challenge with Gecko Model's 1/35 A10 Mk.Ia CS, adding realistic weathering and a diorama base



HELL ON WHEELS



▲ The turret interior appeared both cramped and yet spartan, with the prominent 3.7in (94mm) howitzer and the turret turning mechanism sub-assemblies taking centre stage.



▲ When complete, the hull appeared particularly sparse inside; this was reflective of the interiors found on real vehicles.

During the interwar period, British tank doctrine developed into two distinct categories: slow, heavily armoured 'infantry' types, and faster lighter-armoured 'cruiser' vehicles.

This policy ultimately reduced the effectiveness of British armour during World War Two as the early cruisers proved to be poorly designed. The A10 was created by Vickers in 1934 as a heavier alternative to its Mk.I tank, intended for more of a support-based role. The armour thickness was almost doubled - in some places to 1.2in (30mm) - but the powertrain and lower hull were retained, reducing the top speed to 16mph (26km/h). The A10 served in just a limited fashion during World War Two, being operated in France, North Africa and most prominently in the Balkans, where most were discarded due to track or steering issues. After combat in France, the A10 CS (close support) variant was introduced in 1940, mounting a 3.7in (94mm) howitzer; despite being capable of firing high-explosive shells, it was used predominantly to provide smoke cover. Although records

are limited, it is likely that most (if not all) of the A10s in Greece were abandoned due to breakdowns, and by 1942, the type was considered obsolete and withdrawn from service.

Crew compartments

The build of Gecko Models' 1/35 A10 Mk.Ia CS began with the lower





▲ Despite soft moulded detail – which required a degree of filling – the suspension bogies proved to be fine replicas of the real thing and were fully workable.

hull, which comprised just a basic frame that would subsequently be filled by interior fittings – there were also items provided for the turret innards, which were assembled at the same time as the rest. The front section consisted of a plate to which chairs, gearbox, steering mechanism and ammunition store (for the bow machine gun) were fixed. The chairs were left off at this point (to aid painting), but the fuel tanks, bulkhead, firewall and side shell storage were attached to complete the interior – although it appeared sparse, it was a convincing replica.

At this stage, a deviation from the instructions meant the running gear was set aside in favour of the turret mounting sub-assembly; this meant all interior surfaces could be painted in one sitting. Hence, the turret ring was produced in several stages, beginning

with its floor – this was a single-piece moulding, which replicated the wooden sections accurately. Lastly, the ammunition stowage boxes and seating were attached.

The turret base had a connecting wall to attach it to the floor, but this was left off (again for ease of painting) – a small but accurate rotating mechanism was then constructed and fixed to the turret base, before attention turned to the main gun.

The howitzer was a highlight of the build; constructed from several stages and sub-assemblies, it produced a highly detailed replica of the real weapon, including



▲ The number of wheel types on the vehicle added visual interest and were well detailed; the drive sprocket was deemed to be the most thorough.

muzzle rifling. The completed gun was secured to the front turret plate before other details were added – the two side wall surfaces were very plain, although the rear wall included a radio, with a dedicated photo-etched (PE) metal grille. Considering it wouldn't be visible once the build was completed the turret roof was surprisingly well appointed and even included the emergency escape light.

At this point, the interior was ready for painting and so received Halfords 473116 Grey Primer (www.halfords.com)

direct from an aerosol can; the surfaces were then checked for imperfections and any blemishes smoothed. Gecko Models suggested the interior should be painted silver, however video footage from the A10 based at The Tank Museum at Bovington, Dorset, implied the real colour

MODEL SPEC

Cruiser Tank Mk.Ia CS, A10 Mk.Ia CS

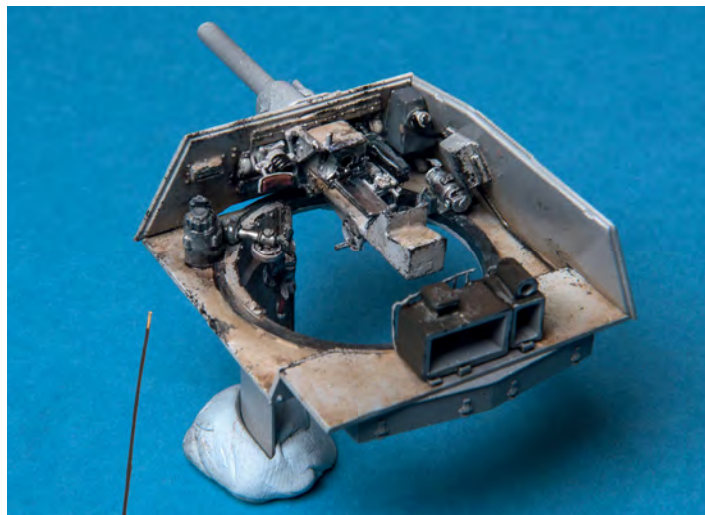
By:	Gecko Models
Stock Code:	35GM0001
Scale:	1/35
Price:	£59.99

Available from:
www.pocketbond.co.uk





▲ The interior was painted as per reference photos, then weathered heavily via a mix of enamel products and pigments to recreate a dirty environment and grease stains.



▲ Similar methods were employed on the turret innards, with dust focused on vertical surfaces where dirt would collect.

“A MAP WAS MADE WITH PAPER SOAKED IN DILUTED PVA (WHITE) GLUE”



was white. Hence, parts received an even coat of Tamiya XF-19 Sky Grey (www.hobbyco.net), then this hue was mixed 50:50 with XF-2 Flat White and sprayed to highlight the raised areas of the interior for tonal interest. Additional detailing was painted by hand

with Vallejo (www.creativemodels.co.uk) and Lifecolor (www.airbrushes.com) acrylics. The entire interior was sealed with a thin coat of Alclad's

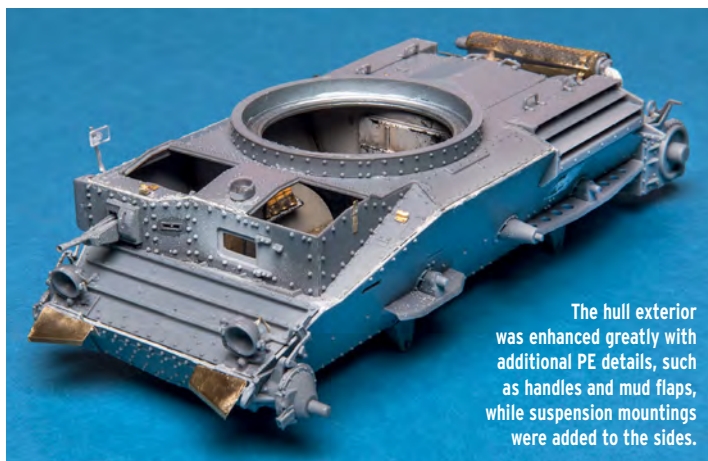
ALC-600 Aqua Gloss (www.alclad2.com) and after a day of drying, the weathering commenced.

The first step was chipping, which was achieved by sponging a custom dark grey tone to areas that would be most worn by use. A light coat of AMMO-MIG's A.MIG-1752 Loose Ground (www.migjimenez.com) was applied to areas where dirt would accumulate, such as corners and around raised details, before the edges were softened with enamel thinners. Vallejo's 73.104 Light Sienna pigment was added carefully onto the floor with a soft brush to blend the 'mud', and then sealed with a misted coat of X-20A

thinner. The final stage was to add fuel and grease stains, and these were replicated via Wilder's NL 35 Grease and NL 36 Old Grease (www.wilder.su) respectively and administered in drops to simulate spillage. A map was made with paper soaked in diluted PVA (white) glue and fastened to the turret seat to add further interest.

Solid support

Following on from the interior, attention turned to the rest of the model, beginning with the suspension and running gear, although for painting purposes these weren't initially attached to the main hull. Four three-wheel suspension bogies (two mirrored pairs) were supplied - these



The hull exterior was enhanced greatly with additional PE details, such as handles and mud flaps, while suspension mountings were added to the sides.

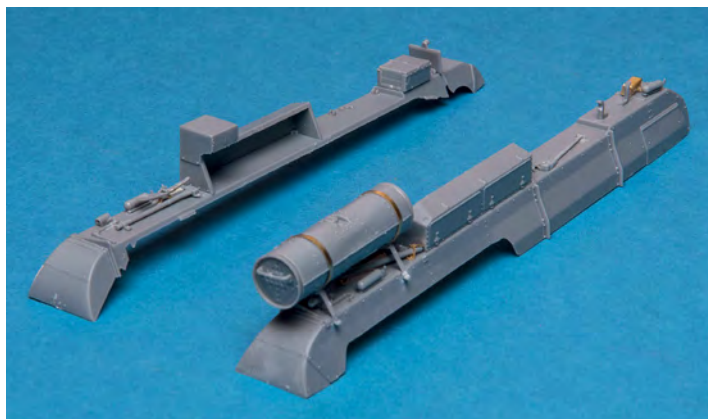


included workable styrene springs and, despite the detail being soft in certain areas, were accurate and fitted well. The roadwheels were comparable in terms of moulding quality, though it was found the drive sprocket was noticeably more refined than similar components, such as the idler.

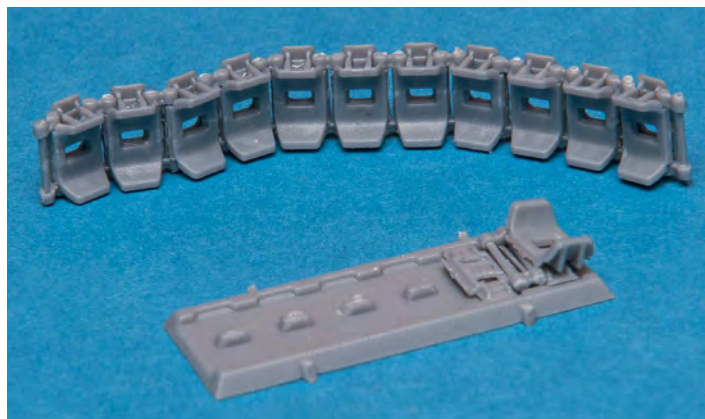
The focus then shifted to the tracks, which were time-consuming to assemble if the intent was to achieve fully workable items. Handily, a jig was provided that allowed six links to be constructed at a time, but as this was plastic, it was unsuitable for use with liquid glue. Instead,

Deluxe Materials AD 70 Plastic Kit Glue (www.deluxematerials.co.uk) was applied via a cocktail stick, with tweezers used to place the parts. Gecko suggested there were 74 links per length, but an additional piece was used to provide greater ease when fitting the tracks to the running gear.

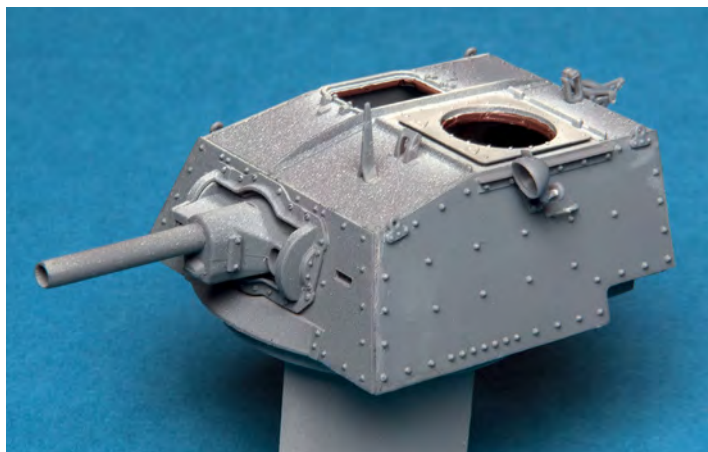
The multi-piece upper hull was then fixed to the lower section, along with all the hatches, handles and other fittings. The exhaust pipe assembly came next, but this proved difficult as it utilised PE supports, which were thin, delicate and problematic to attach. That said, they were convincing



▲ Side skirts were left off for painting, so the tracks could be fitted first. The left unit featured a large external fuel tank, which would become a visual centrepiece on the vehicle.



▲ Gecko's tracks were fiddly to assemble, but the effort paid off as they were fully workable and captured the distinctive shape of the real items.



▲ The turret, although small, had a distinctive shape and the crisply moulded rivets were a lovely point of focus.



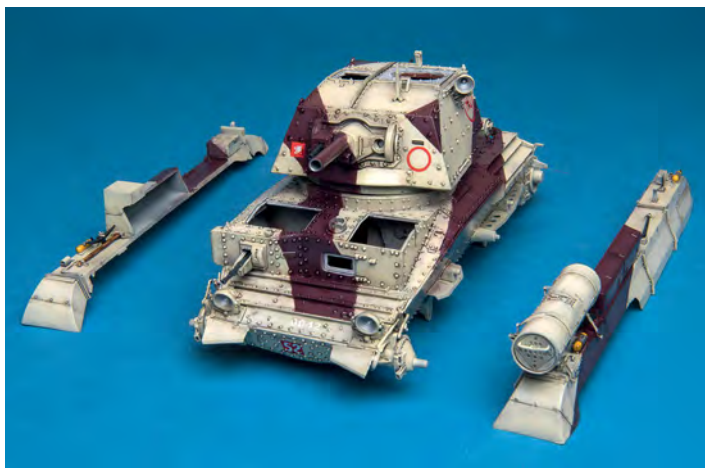
▲ AK Interactive's Portland Stone formed the base camouflage layer, while the disruptive pattern was formed with RC045 Light Purple Brown.



“DECALING WAS A CHALLENGE DUE TO THE LARGE NUMBER OF RIVETS”



▲ Once again, riveting caused issues when applying the decals; most required considerable care to place correctly, with raised surfaces being touched up to restore their appearance.



▲ A wash really helped to accentuate the raised details and formed a basis for more advanced weathering techniques.

when secured and could be bent and creased for a more realistic appearance, due to their fragility.

Top and sides

Next on the agenda was assembling the turret - this was generally quite simple as the components had all been prepared during the interior painting stage - the fit was excellent and no filler was required. A few items were added in the form of hatches, searchlight and radio antenna, all of which were well detailed and could be attached neatly. The last component was particularly fine, but as it was susceptible to breaking, brass wire was used as an alternative - the final parts to be added were the side skirts, but these required the tracks to be secured first. The former were moulded as single-piece components - equipment boxes and tools were then fastened to these items. One such item was the prominent fuel tank on the left side, which could be viewed as a 'mini-kit' in its own right - its main body was a two-piece construction, onto which the ends were connected. Grab handles were replaced with brass wire as it was much finer

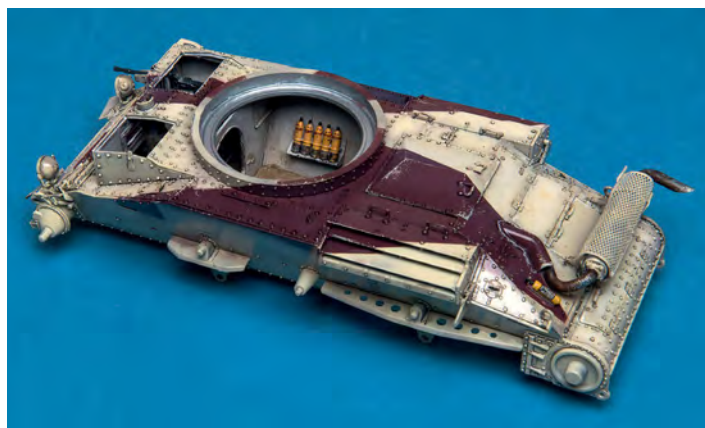
and less susceptible to damage, while fixing straps were provided as PE components and curved round the tank once it had been secured. Once these ancillaries had been attached, the tank was nearly ready for painting, but one final item - the water can storage - required fitting; it was surprisingly complex and highly detailed,



SIGNS OF LIFE

The diorama produced for this build featured several figures from various products, alongside the sole example supplied with the kit. Most were produced straight from the box, but the mule was modified to depict it carrying supplies; masking tape was used for harnesses and straps, cocktail sticks for the frame and twigs (from the garden) for the logs. The figure sets used were:

- Masterbox MB3564 Commonwealth AFV Crew
- Masterbox MB3588 Eastern Region Peasants, WWII Era
- Tamiya 35128 Livestock set



▲ The first stage of chipping represented the areas where the darker camouflage tone had been worn away to reveal the base colour underneath.

with minute lids and PE handles. With the model assembled, it was decided the hatches would be left open so the model could be placed in a diorama, consequently for painting, these were stuffed with paper or covered with masking tape to prevent overspray.

Sharp lines

The model provided three markings options; two for Greece-based vehicles and one North Africa-deployed machine, with all

the schemes featuring an angular 'Caunter' pattern of Portland Stone and Light Purple Brown. For this build, the choice was made for a Headquarters C Squadron, 3rd Royal Tank Regiment tank, based in Greece during 1941.

The first step was cleaning the surface with isopropyl alcohol to remove any dust and grime, followed by several coats of Halfords Grey Primer, which was sanded where the paint dried unevenly. The



BALKAN BASE

The idea for this diorama was to create a scene depicting the Balkans campaign in Greece in April 1941. The cruisers operated all over that country, but this scene would take place in a mountainous region, with rocks and mud, plus common indigenous flowers. As a narrative, Greek villagers were envisaged to be greeting Allied troops

with open arms, treating them as saviours, despite the British knowing they could never stop the German invasion.

The base was made from a rectangle of insulation foam, cut into a slope with a defined road area, and the surrounding areas were created with offcuts – edges were lined with balsa wood, which was

shaped with a hobby knife. Once the wood was secured, a plaster mix was employed to form the landscape, keeping the road surface flat. After several days, the edges were covered in PVA glue, before rocks and gravel (collected from the garden) were sprinkled carefully over the sides. The whole base was then primed using a grey colour and pre-shaded with black, followed by a variety of brown tones and pigments.

The first vegetation applied was in the form of tall grass, glued upright in patches, with shorter grass areas being static products applied in small areas. Flowers were then attached, made from a mix of pre-bought items and home-made additions of grass tufts and coloured powder. The figures and tank were fixed to the base with PVA glue, before a final layer of pigments was used to unify the components.



**“FUEL STAINS WERE
ADDED TO THE
EXTERNAL TANK”**

base tone was BSC No.64 Portland Stone, which was replicated with AK Interactive's Real Color RCO41 Portland Stone (www.ak-interactive.com). This was airbrushed in thin coats as the hue was quite light and was built up gradually until the desired shade was achieved. Once the base coat was completed, the paint was mixed with a hint of RCO03 White Grey and used to fade the original shade very slightly. Next, the disruptive pattern was set with masking tape - this required plenty of patience due to the numerous raised rivets and surface detail. The side skirts were attached temporarily to the hull with tape to ensure the patterning was aligned correctly. AK Interactive's RCO45 Light Purple Brown appeared to exhibit more of a reddish tone than the colour guide, but it wasn't altered as the manufacturer claimed it was accurate. The paint was sprayed in a heavier coat than the base tone to minimise any overspray, then the same process of mixing with RCO03 White Grey and applying post-shading and highlights was repeated. Several areas of overspray were noted after the masking tape was lifted - these were remedied with an X-20A Thinner-dampened brush to dilute and remove the offending



paint. Once most of the excess colour was removed, the base hue was sprayed lightly over the top to minimise any discolouration.

The tracks received XF-72 JGSDF Brown in a solid coat, after which

detail was hand-painted with acrylics in accordance with the colour guide; the entire model was then sealed with a coat of ALC-600 Aqua Gloss. Decaling was a challenge due to the large number

of rivets - it was found the best solution was to add the marking onto a surface and then use a hobby knife to cut a hole, before the raised area was painted with an appropriate matching colour. Lastly, another two applications of ALC-600 Aqua Gloss was used to seal the decoration.

Dry and dusty

The vehicle depicted operated in the muddy and dusty Greek mountains during spring 1941, but as the region was hot, the mud would have dried quickly on the vehicle exterior. First, NLO2 Deep Shadow Wash was administered, concentrating this around rivets and other raised features to accentuate the detail. Any excess was removed via an enamel thinner-soaked brush, which softened the edges for a more natural appearance. The next stage was chipping, which began with the RCO03 Portland Stone tone applied to the RCO45 Purple Brown areas to imply worn paint revealing the base colour. This was limited to areas more susceptible to wear - around hatch edges, raised surfaces and tools clamps, and was added in moderation as the vehicle was intended to appear as if it had entered service recently. The



▲ Deeper chips and scratches were painted with a fine brush and dark brown acrylic paint, to simulate damage from travelling through dense foliage.



▲ The first layer of 'muck' was to replicate thick-textured dried mud, which was produced from enamel products.

◀ Extreme heat on the thin metal exhaust caused heavy rusting effects, which were recreated via a mix of oils and pigments, applied over blue and grey base tones.

▼ Dust was created by combining pigments and enamels, then adding the blend to the lower hull and areas on the upper surfaces where it would collect naturally.





▲ Angled and vertical surfaces had the dust streaked downwards to show the way that the dirt had fallen during use.



▲ Initially, tracks were painted in a light mud colour, as this would prepare them for the weathering stages.

next shade was steel, to represent deeper chips. This was brushed on in a similar fashion to the previous layer, mainly on edges and raised surfaces, whereas on the side skirts it was more directional, to simulate scratches from travelling through thick foliage.

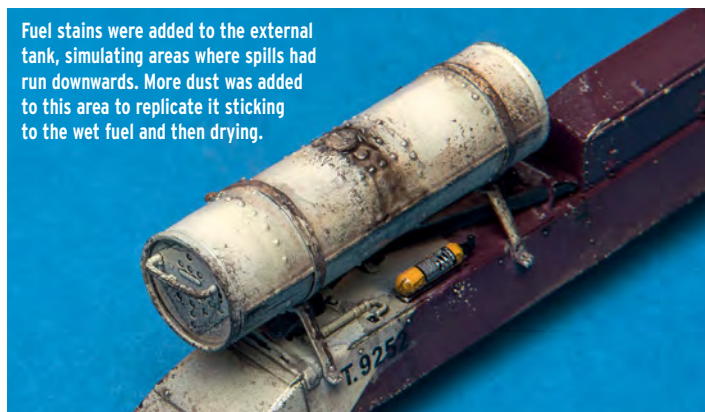
The following step was to imitate corroded surfaces, so a custom mix was made from Burnt Umber oil paints, enamel thinner and various rust-coloured pigments. This was dabbed onto several of the largest chips and blended subtly, plus on vertical surfaces it was dragged down in a streaking motion. On the exhaust system, several layers were painted onto the pipe, while the mesh guard received a slightly thicker application to simulate heavier rust - the oxidising process would be accelerated here as it was made from thinner metal and would be subject to high temperatures. Lastly, the mix was blended around the edges to recreate lighter rust, and the Burnt Umber was used to add grain to the wooden tools, and then the model was ready for 'muck'.

This began with A.MIG-1702 Turned Earth to replicate areas where mud had collected on the running gear and then dried, with the effect kept light and subdued.

It was supplemented by NL 29 Brown Mud Spatter, which was used to create areas of dried dust around the running gear and tracks, plus the hull and turret, focusing on corners and crevices. Small areas were worked on one at a time and



Fuel stains were added to the external tank, simulating areas where spills had run downwards. More dust was added to this area to replicate it sticking to the wet fuel and then drying.



▲ Once the suspension and wheels had been fixed to the hull, a light coat of darker-toned pigments was added to highlight areas of fresher mud.

once dry, the effect was blended very softly. A light coat of 73.104 Light Sienna pigment was brushed onto these areas to enhance the dust effect, and subsequently sealed via a diluted coat of X-20A thinner.

The penultimate external weathering

step was fuel and grease stains - as these attract dust, a second coat of pigments was applied prior to the application. The first product utilised was NL36 Old Grease, which was placed around fuel caps in a random manner, and where the cap was vertical it was dragged downwards to reproduce streaking and spills. This was further enhanced with NL35 Grease, which was applied more minimally to simulate fresher stains. The final effect was exhaust staining, created by spraying a very thin coat of XF-1 Black on the end of the exhaust and the side skirt below the pipe. Black pigment was dusted onto those areas and blended softly on the surface. Lastly, the tracks and side skirts were attached to the hull.

Cruisin'

Overall, Gecko Models' 1/35 A10 Mk.Ia CS cruiser was an enjoyable model to build, although it wasn't without issues and proved a more challenging project than anticipated. It's always great to see manufacturers take on a lesser-known subject and hopefully Gecko will continue to further expand its cruiser line or even branch into other armoured vehicles.

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Tools of the Trade

Following several reader questions, AMW editor **Stu Fone** offers the first in a series of instructional articles aimed at novice modellers or those returning to the hobby



▲ Here's a very basic toolkit, with glue, thinners, paint, tweezers, craft knives, scissors, a sanding stick and files, plus brushes, all on a small cutting mat.

For those entering the hobby for the first time, welcome. For those returning, welcome back.

Modelling is one of the most relaxing and satisfying pastimes, offering a wealth of creative opportunities and years of enjoyment. The aim of this series is to provide an elementary grounding in the tools and techniques required, on which readers can then build their skills. You'll also find Back to Basics panels within upcoming articles in AMW, highlighting skill sets particular to a build.

For this introduction, we'll look at what makes a 'core' toolkit for building your first few kits, although exactly what goes into your own version is completely up to you.

Where to start

In its simplest form, modelling equipment can be reduced to a means of cutting parts from

runners, handling the individual components (especially those smaller items), gluing them together, painting them and adding decals. The great news is all such tools are readily available at local craft/hobby shops at minimal cost - ideal for those new to modelling. A small sub-set of equipment helps to make the aforementioned easier (such as a cutting mat and steel ruler), so an initial shopping list could look like this:

- Craft knife
- Side-action cutters
- Cutting mat
- Scissors
- Holding aids (including tweezers, clothes pegs or clamps, cocktail sticks, tape)
- Glue
- Sanding paper/pads/sticks
- Files
- Paintbrushes
- Paint
- Steel ruler

GLOSSARY

Modelling can seem to have a language all its own, so each article will include a handy list of common terms:

Runner

Also known colloquially (but somewhat erroneously) as sprues, these are the styrene frames which carry the parts. The vast majority are formed by injecting styrene into a two-piece mould, which leaves a slight seam where the two halves join. More advanced techniques involve a process known as 'slide moulding'. This process involves several precision-machined tools that slide into position and produce much finer detail and fewer seams.

Decals

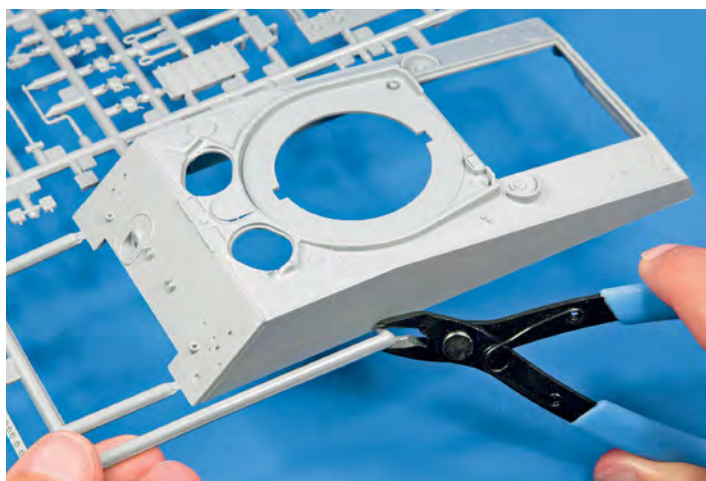
Commonly called transfers or markings, the most common types are designed to be soaked in water prior to application. However, there are also 'dry' versions, which are placed against a model's surface and transferred by burnishing them with a hard-tipped object, such as a ballpoint pen or rounded wooden dowel.

CUTTING TOOLS



▲ Cutting tools come in various forms, from craft knives to 'snippers' and scissors, while aids such as a steel rule ensures straight lines and cutting mats protect underlying surfaces.

Craft knives are the usual method of removing parts from runners and there is a broad range of styles, from slide-action types with blade sections that can be snapped off when the edges become blunt, to handles with interchangeable blades. Among the latter are the American-made X-Acto series and British Swann Morton scalpels, and there is a wide range of straight and curved edged blades that can be fitted. Note that the blades are very sharp and best not used by children, even with adult supervision; X-Acto's blades are stronger, but Swann Morton's are sharper. Side-action cutters, comprising two angled blades that are brought together in a scissor-style action, have the advantage of being more robust than knife blades and are easier for younger modellers to use. Fine scissors are also invaluable, whether it's for cutting decals from the surrounding sheet or trimming tape for masking. Outside of these key items, a cutting mat is a must, as it protects any underlying surfaces from damage while also acting as a handy modelling 'desk'. Several firms, such as Humbrol, produce bespoke modelling workstations, incorporating a cutting mat on a plastic base, with integral holders for paints, brushes and glue. A steel ruler (flexible if possible) is also well worth the initial expense, as it's hard wearing and resistant to damage and can be used when cutting flat parts or masking tape, scratch-building or re-scribing (the last two skills will be covered in later issues).

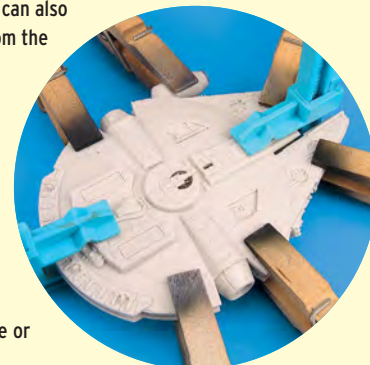


GETTING A GRIP



▲ Not all tools come from a hobby shop. These tweezers and bulldog and crocodile clips were sourced from a stationary and automotive store, while everything else is available from most supermarkets.

Once items have been removed from runners, there's often a need to handle them while they are painted and/or assembled, especially if they're small. Tweezers are very useful and are available in packs offering pointed, angled, reverse-action (squeeze to open) and flat-bladed forms. Small crocodile clips are handy tools when it comes to painting small parts, along with bulldog clips or clothes pegs for larger pieces. Similarly, masking or common household tape is great for holding items together when dry-fitting, but can also assist when removing small parts from the runner, as can Blu Tack. Simply loop the tape adhesive side outward and stick it to your workbench, press the part against it and, when it's separated from the frame, it won't be catapulted off the desk in the dreaded 'ping' moment. Cocktail sticks are ideal when painting wheels, as they can be inserted into axle holes, and can be used with tape or Blu Tack on tiny components.



STUCK TOGETHER

Styrene adhesives generally work by softening the mating surfaces to a greater or lesser degree, after which pressure serves to 'weld' the parts together. They are usually produced in tubes or bottles – the former has a thick, almost jam-like consistency, while the latter is liquid and comes with an applicator brush. The basic rule-of-thumb is that the thinner the solution, the quicker the drying time.



▲ There is a surprising variety of adhesives on the market, but most are liquids and dispensed via a dropper needle or brush, while tube glue is still used. White glue (also known as wood glue or PVA) dries clear and can be cleaned with water when wet, making it ideal for transparent parts, such as canopies.

ADDING COLOUR



▲ Basic elements for painting are the colours, proprietary thinners and a mixing palette (either for diluting or blending).

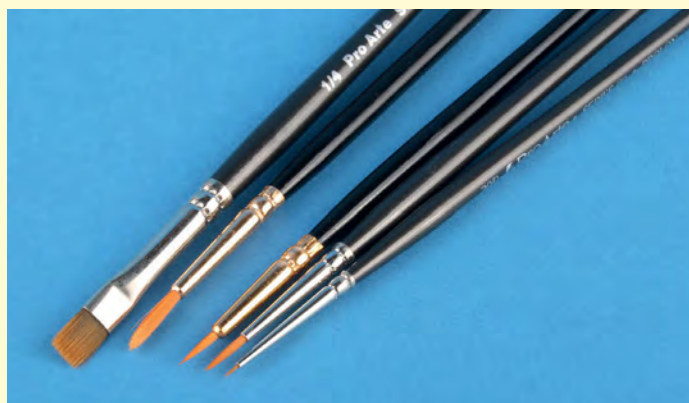
It wasn't too long ago there were just four major paint manufacturers, three of which (Humbrol, Revell and Testors) produced oil-based enamels, while the fourth (Tamiya) favoured an alcohol-based acrylic formula. There are now approximately 20 firms producing shades in lacquer, alcohol-based acrylic, water-based acrylic and enamel compositions (listed in order of drying time from fastest to slowest). Novice modellers may find enamels the easiest to start with as they take longer to dry, but water-based acrylics are increasingly popular with beginners and often feature in 'starter' or 'gift' sets (see photo), along with glue and brushes.

Thinners are required for cleaning brushes and diluting the colours for brush/airbrush application (more on this in later issues), although there are now 'airbrush-ready' products, which have a less viscous consistency. Most paint manufacturers produce their own thinners, and some can work with other brands, but use of the firm's own products is recommended until your level of experience grows.

A mixing/blending palette is a very useful piece of equipment, either for diluting paints or mixing bespoke colours. These are very cheap to buy and are made from a hard-wearing plastic or ceramic that tolerates even the harshest lacquer and/or thinners formulations.



▲ 'Gift' or 'starter' sets are ideal for a first kit, as they provide all necessary paints, plus brushes and adhesive.



▲ You'll need various sizes of paint brushes, with rounded (for fine items and detail) and flat (for area coverage) shaped versions. Starter set items are ideal initially, but always try to buy the best you can afford (ideally sable) and clean them carefully to preserve the bristles.

◀ There are four main types of modelling paint - from left to right: lacquers, alcohol-based acrylics, water-based acrylics and enamels - each of which requires a different type of thinners.

PART 1: TOOLS AND EQUIPMENT

NEATENING THE PARTS



In addition to Wet and Dry abrasive paper sheets, files and foam-padded sanders are ideal for smoothing and neatening parts, while knives can be used as scrapers and sanders by gluing abrasive paper to the handle.

Once items have been removed from runners, there's often a need to handle them while they are painted and/or assembled, especially if they're small. Tweezers are very useful and are available in packs offering pointed, angled, reverse-action (squeeze to open) and flat-bladed forms. Small crocodile clips are handy tools when it comes to painting small parts, along with bulldog clips or clothes pegs for larger pieces. Similarly, masking or common household tape is great for holding items together when dry-fitting, but can also assist when removing small parts from the runner, as can Blu Tack. Simply loop the tape adhesive side outward and stick it to your workbench, press the part against it and, when it's separated from the frame, it won't be catapulted off the desk in the dreaded 'ping' moment. Cocktail sticks are ideal when painting wheels, as they can be inserted into axle holes, and can be used with tape or Blu Tack on tiny components.



▲ While this build, of Hasegawa's 1/700 IJN *Furutaka* is more advanced, it's notable that many items identified in the 'core' shopping list are present; knife, clippers, cocktail sticks, and tweezers. Here they have been used for the ship's rigging, but as will be seen, they have multiple uses.

Next steps

As you gain more experience and seek to refine builds by eliminating assembly seams and any blemishes on decals, the following items could be added to your toolkit, depending on personal preferences. We'll cover these in later issues.

- Razor saws (also called craft saws)
- Modelling putty
- Decal setting solutions
- Cyanoacrylate adhesive (known popularly as Super Glue)
- Fine-grade abrasive/sanding cloths
- Scribing tools
- Weathering products (washes, pigments)
- An airbrush



NEXT ISSUE

Cutting and preparation -

In February's *AMW*, we'll look at the best techniques for removing the parts from the runners and ready for assembly (although there's useful advice in this issue's Typhoon build, on p50)

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Manna from (Modelling) Heaven



▲ Senior National Champion Michael Papadakis' stunning Koster Aero 1/48 vac-form Fw 200C-4 featured just the original wings and fuselage plus Vector engines – everything else was scratch-built.

For a first-time visitor, Scale ModelWorld must seem overwhelming, with its mix of clubs, enthusiasts, traders and a world-famous competition, yet the friendly atmosphere makes everyone feel welcome.

Held once again at the Telford International Centre, Shropshire, it's the most significant event of the UK modelling calendar, and where many product announcements and 'reveals' are made. Chief among this year's newly tooled unveilings was Airfix's 1/72 Vulcan B.2, which caused a real stir among the attendees. Most new products were aircraft, from Zoukei-Mura's 1/32 Hs 129 and 1/48 F-4E Phantom, to Academy's 1/72 F-14A Tomcat, Hong Kong Models' 1/48 B-17G Flying Fortress (early) and DACO's 1/32 Fouga Magister.

Revell's 1/24 Land Rover Series III was the exception, and this was displayed in built and component form, including a test-shot example by AMW's Dr James Whalen (see



▲ This Bronco Model Cruiser Tank A10 CS was awarded best in class plus the IPMS Malta Trophy and IPMS Czech Republic Award, for builder Mark Ford.



▲ Protar's 1/9 1927 350cc Bianchi 'Freccia Celeste' was given a complete makeover courtesy of Peter Buckingham, with re-spoked wheels plus handmade linkages, levers and covers.



▲ Lt Saburo Shindo's Mitsubishi A6M2b Zero was replicated by Buba Wojtek – the mirrored base showed how the detail work extended below the airframe.



▲ Maurizio Barbalucca's IJN Gunboat *Ataka* scene portrayed Five Star Model's 1/700 offering alongside a tug and fishing vessels from Rainbow models, all on a realistic water base.



▲ This Lancia 3Ro was produced by Ondrej Smekal with MARS' resin kit, plus a considerable number of homemade items and a reworked Tamiya 1/48 Skoda 100/17 gun.



▲ Inima de Almeida Siqueira Filho achieved a gorgeous metallic finish on his Zoukei-Mura 1/32 J2M3 Raiden (Jack) Type 21, which also featured improved spark plug covers, welds and riveting.

Dec 2019, p.26). Test-shots for previous announcements were also in abundance; Wingnut Wings led the way with its 1/32 Lancaster B.1/III and Handley-Page O/100 bombers, while Airfix's 1/48 Tiger Moth and Italeri's 1/72 F-35B were there for all to admire.

It was also great to see companies, such as Dora Wings and Armory, displaying at the event; the latter brought its first-ever styrene kit release, a 1/48 Fairey Flycatcher, while Latvian firm Copper State Models displayed examples of its new 1/35 Romfell Panzerwagen.

This year's competition raised the benchmark even further, despite there being a smaller number of entrants. Michael Papadakis' 1/48 converted Koster vac-form



▲ Junior National Champion Alex Bienek used Tamiya's 1/35 T-55 Enigma to reproduce the Imperial War Museum North's exhibit, located outside the Manchester exhibition space.



▲ Nicolas Poncini corrected the fuselage shape of Aeroclub's 1/48 vac-formed DH Venom Mk.4, before achieving an attractive finish with Alclad paints and Matterhorn Circle decals.



▲ D deservedly awarded 'Best Figure', Christian Lecuyot's Pegaso 90mm Crossbowman was a masterclass in figure painting with oils and acrylics, plus homemade groundwork.



▲ AMW contributor Nick Shuttleworth scratch-built the additional pipework and wiring from solder to add a wealth of detail to Kit Form Services' 1/24 FV 603 Alvis Saracen Mk.5 6x6 APC.



▲ An undoubted star of the show was Jay Boyle's 'Balanced Diet', which replicated the famous *Lunch Atop a Skyscraper* photograph, taken during construction of the Empire State Building, with 11 scratch-built 120mm figures.



▲ Amazingly, this 1963 Piper Cherokee 180 is Airfix's 1973-vintage kit; Alexandre Bigey shortened the fuselage, wingspan and tailplane, reinstated panel lines and scratch-built the engine, interior and undercarriage on this splendid conversion.



▲ The eye-catching colour scheme on Louis Chang's 1/48 Su-33 Flanker-D was matched with incredible detail - he added a scratch-built engine and undercarriage hydraulic/brake lines to the basic styrene and enhanced the wing folds and cockpit interior.

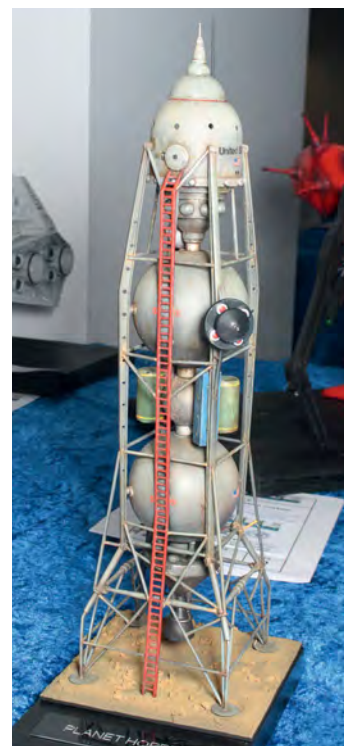
Fw 200C-4 Condor airliner was a worthy winner of the Senior National Championship Award, while Junior Champion Alex Bienek's 1/35 T-55 drew copious compliments on its superb finish.

While the competition was an undoubted focal point, for many the attraction of SMW remains the blend of clubs, special interest groups and traders, which sets this event apart from most other large-scale gatherings in the hobby. It is the perfect venue for modellers to catch up on the latest releases, accessories and references, as well as to discuss their latest projects.

There was plenty to marvel at in the special displays, with a large exhibition for the 70th anniversary English Electric Canberra, while clubs set aside space on their stands to commemorate 75 years since the Allied D-Day landings in occupied Normandy.

Stu Fone and John Fuller

AMW



▲ Representing the 'early Jurassic period', this Lindberg Star Probe kit was enhanced with engines, hatches, spare antenna and framework by builder Mark Chadbourne.

 **VIEW MORE ONLINE**
www.airfixmodelworld.com



▲ Tamiya's 1/32 F4U Corsair was built as Gregory 'Pappy' Boyington's aircraft by Kai Reckstadt as part of this propaganda film debriefing scene, along with various figures and sections of Brengun punched steel planking.

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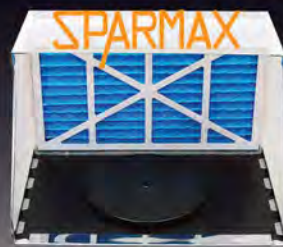
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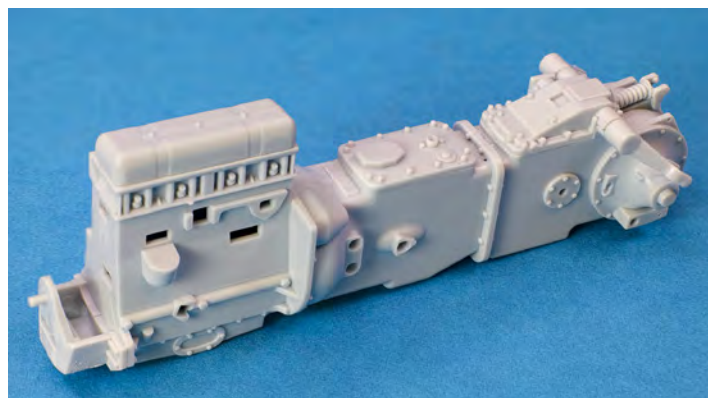


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Steve Budd steers Heller's engaging kit of Ferguson's successful 1/24 TE-20 tractor over the finish line

PRETTY IN PINK

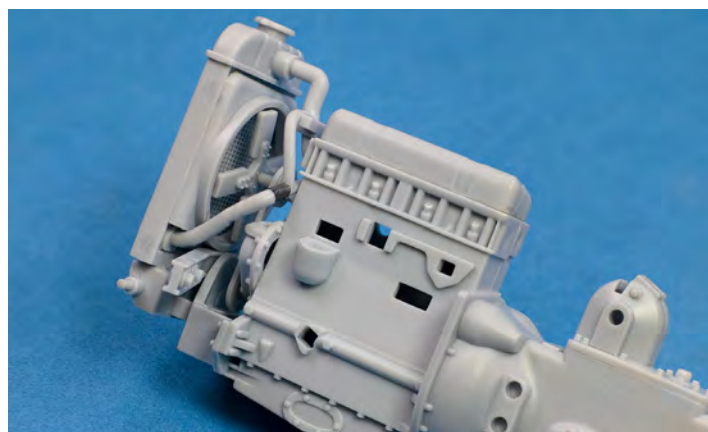


Designed by Irish-born Harry Ferguson, the 15hp TE-20 was a production staple of the Standard Motor Company at its plant in Coventry from 1946 until manufacture ceased in 1956.

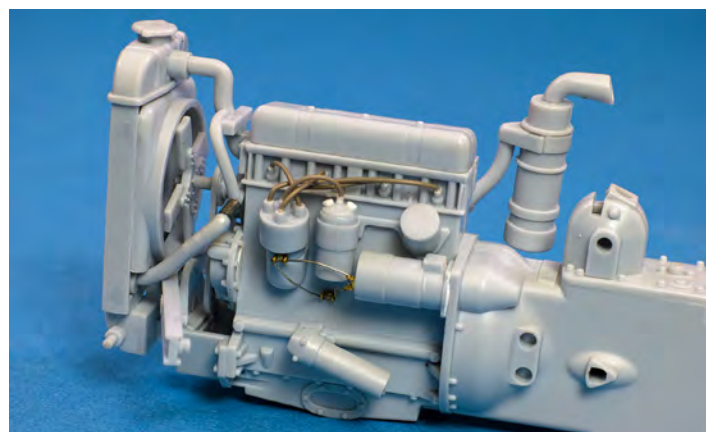
Those ten years of production resulted in more than half a million little 'Fergies' being released into

service and 63 years later there are still examples around the world earning their keep day in, day out. Among the many nicknames this vehicle earned was 'Petit Gris' (Little Grey) and its longevity was testament to the firm's engineering, robust construction and simple maintenance requirements. ▶

◀ The 'heart' of the little Fergie was accomplished over assembly Stages 1 and 2. Fit was mostly fine, but part B15 (located over the final drive housing) left a narrow gap that was closed easily with Mr. Hobby's Mr. Dissolved Putty. A decision to defer paint until the entire kit, minus bodywork and wheels, was assembled was settled on from the outset.



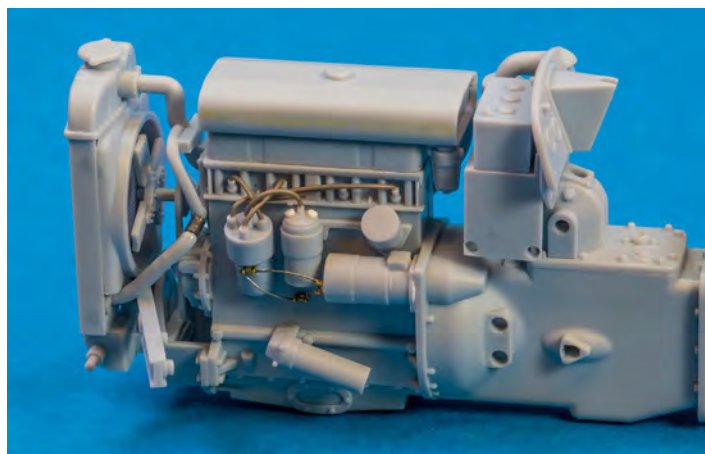
▲ Unfortunately, Heller's engineering wasn't to its usual standards when trial-fitting the coolant hoses in Stage 8, as the lower section fouled the left side of the suspension arm (Part D7). The location point on the radiator was simply moved until it was clear of the component, after which the lower hose was then cut free, extended with plastic rod and reattached.



▲ Adding wires from the spark plugs to the distributor cap was an essential extra detail, given the visibility of this area. Reference photos from the internet confirmed the correct wiring sequence. Shep Paine's principle of 'creative gizmology' was gleefully adopted, with scraps of fuse wire and leftover photo-etched (PE) metal parts from the spares box.



▲ Stages 11 to 14 resulted in the addition of the exhaust manifold and related items. This was also a time to start considering whether to model the diesel version (with a vertical pipe) or the petrol option (with its low, horizontally mounted exhaust). In the end, the latter was selected, but this was a decision Heller's instructions left until Stage 55.



▲ Navigating Stages 16, 17 and 18 resulted in the little Fergie receiving a fuel tank, battery and dashboard. By this point, it was clear in my mind the forward bodywork would be closed - the kit allows for it to hinge if desired, revealing what lurks beneath. No wiring was added to embellish the battery as it would be hidden.



MODEL SPEC

Ferguson TE-20 tractor

By: Heller

Stock Code: 81401

Scale: 1/24

Price: £23.99

Available from: Heller,
www.heller.fr



▲ Rather than opting for a British seat and associated spring support, it was decided to use the French item instead (Parts B31 and B9), as these seemed more suitable for the subsequent weathering. Undoubtedly, 60-plus years after leaving the Coventry factory, there are Fergies loose in the world with 'mixed parentage' features such as this.



▲ Although vinyl tyres don't attract much love in the modelling world, I was perfectly happy with them here. A test-fit on the assembled hubs confirmed the tyres sat snugly, ensuring most of the necessary paint and weathering could be applied before proceeding to that stage. No glue was necessary later and this meant no risk of damage to the finish.



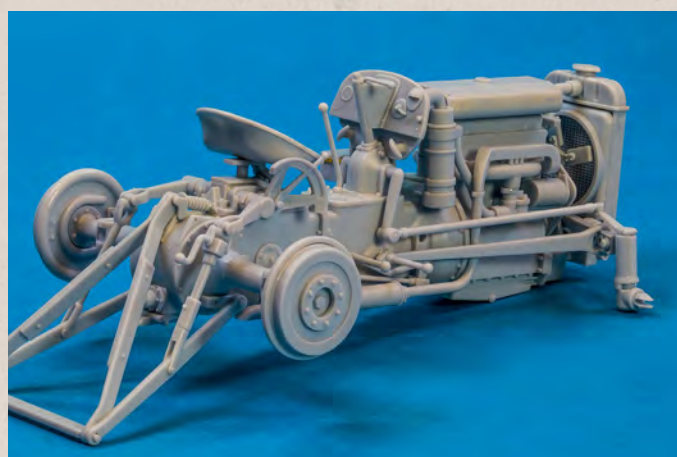
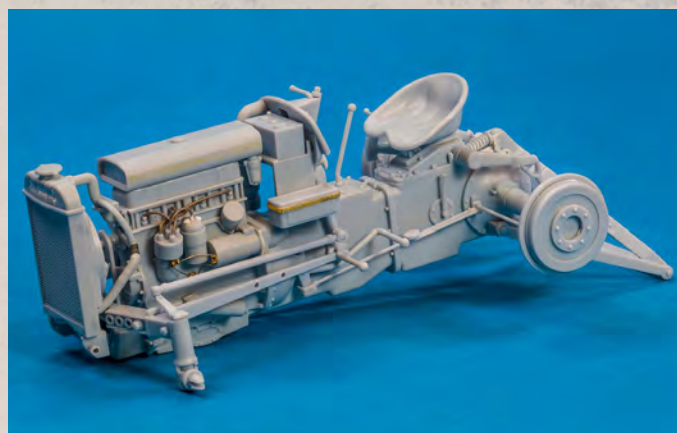


▲ The engine/radiator cover was a three-part sub-assembly that required Mr. Dissolved Putty to seal a few minor seam gaps. The mudguards revealed a selection of ejector pin marks along the top inner faces that would still be visible after the rear wheels were in place and the same product was employed to treat them.



▲ Heller suggested holes should be drilled in the engine cover if headlights were to be fitted, but a 'clean' look was preferred, with just the reversing lamp on the right-hand mudguard installed in this instance. Assembly was made easier by gluing the side panels in situ and the front section last. Minor tidying of the Mr. Dissolved Putty was all that remained before painting commenced.

PERFECT PREPARATIONS



The build was progressed to this point before receiving a thorough degreasing in preparation for primer. The object was simply to finish as much assembly and remedial repairs so the following painting and weathering would be relatively unaffected by finally uniting any completed sub-assemblies.



▲ Wheel hubs were cemented securely before priming, as other builds have reported difficulties with the Heller's suggested approach. AMMO-MIG's A.MIG 2024 grey One Shot Primer did a fine job of covering the plastic, wire and PE smoothly and in a single application, just as it said on the tin - or the 60ml bottle in this case.



▲ A book order from AMMO-MIG included an unexpected gift of A.MIG-2006 Rust Primer. It was perfect timing and was pressed immediately into service, covering every bit as effectively as the grey that preceded it. The two primers also coated the inner surfaces of the vinyl tyres as this material is reputed to degrade styrene over time.



▲ The six lovely shades supplied in A.MIG-7106 Rust Effects Colors were largely dry-sponged on to the rust primer, working from dark to light tones, while trying to be progressively sparing stage by stage. It wasn't necessary to blend or soften the tones, as the flecks and patches would later be muted by the later top colour and chipping effects.



**"THE SCOPE FOR
EXTRA DETAILING
IS VERY BROAD"**



▲ AK Interactive's AK089 Heavy Chipping Fluid was mixed equally with de-ionised battery water and sprayed in five moderate coats on to the wheel hubs. Tamiya XF-55 Deck Tan was the warm grey tone selected for everything bar the forward bodywork and mudguards and once touch-dry was scrubbed with a stiff, short-bristled brush.



▲ A wash or two was always on the cards, so my favourite oils brand, Michael Harding, was wheeled out; in this case 126 Burnt Umber, mixed with artist-quality white spirit (mineral spirits in the US) was employed. This added the requisite dirt and grime but shifted the overall tone to tan. Fortunately, this cast would later be corrected easily.



“THIS WAS A
FUN PROJECT”



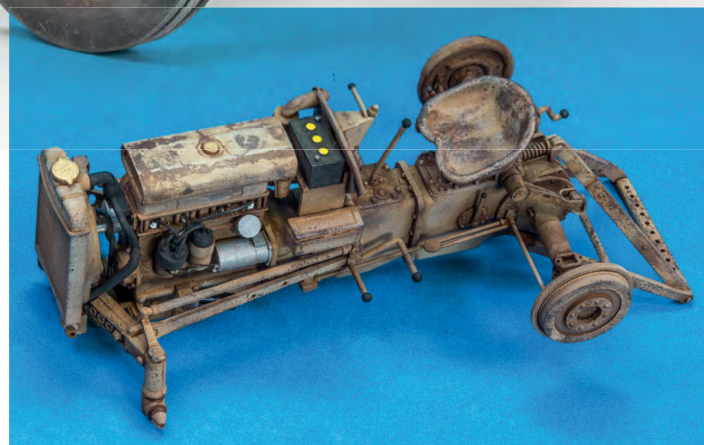
▲ This is how Mr. Hobby's H33 Russet looks after being scrubbed ruthlessly with a stiff brush. Progress was checked often, as a gloss varnish wasn't applied between the upper and lower colours. Usually a barrier coat was de rigueur for me - here, however, I was able to carefully erode parts of the rust, altering and softening the end result.



▲ With plenty of coats of AK's Heavy Chipping Fluid in situ, dried with an airbrush (avoiding the heat of a hairdryer, which apparently alters its behaviour negatively), XF-55 Deck Tan was applied on top (again, no clear barrier coat) in a couple of moderately thick layers. Scrubbing was restricted to three main areas - the fuel tank, rear-lift cradle and seat.



▲ AMMO-MIG's Rust Effects Colors were user-friendly and small amounts were dispensed on to a 'wet palate' and sponged over the mudguard interiors. The marks were then blended with a damp brush. The 'old rust' look that resulted was so pleasing it was left unchanged, contrasting with the satin surface of the worn pink and adjacent chassis weathering.



▲ Diluted Burnt Umber wash was dabbed in varying amounts around the hardware, shifting the tone to tan. This was fine around the lifting cradle and engine, but reversed elsewhere with light grey pigment, which was brushed on firmly, feathered into surrounding shading. The result contrasted well - while not swamping - the underlying weathering.

MATERIALS AT A GLANCE

AK Interactive (www.ak-interactive.com)
AK089 Heavy Chipping Fluid

AMMO-MIG (www.migjimenez.com)
A.MIG-2024 Grey One Shot Primer
A.MIG-2006 Rust Primer
A.MIG-7106 Rust Effects Colors

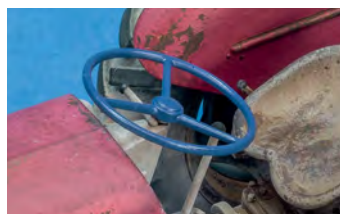
Mr. Hobby (www.albionhobbies.com)
Mr. Dissolved Putty
H33 Russet
H35 Cobalt Blue

Michael Harding
(www.michaelharding.co.uk)
126 Burnt Umber

Tamiya (www.hobbyco.net)
XF-55 Deck Tan

Wrapping up

Heller's little Fergie made a great diversion from my usual diet of plastic and gave plenty of opportunity to experiment



▲ The steering wheel was sprayed H35 Cobalt Blue, a final reflection of a funky farmer giving his little Fergie a lift from the standard grey colour scheme. Its fresh appearance contrasted strongly with the rest of the vehicle's worn surfaces.

► Final assembly was trouble-free and glue was carefully kept a minimum. The tyres were weathered entirely with light grey and tan pastel chalks and were left unfixed.

with weathering, although it would be similarly acceptable to finish it 'factory fresh'. The scope for extra detailing is very broad and limited only to

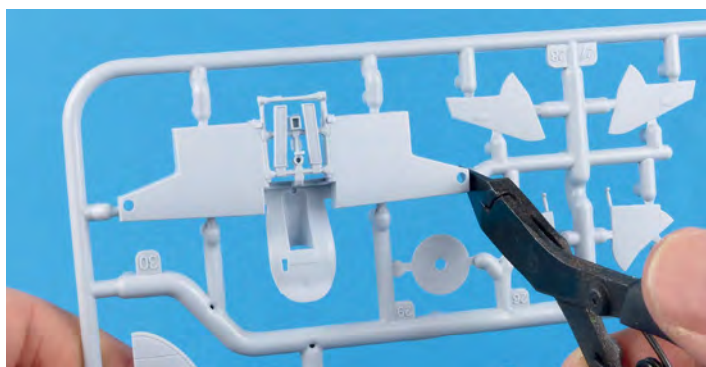
available references - all widely accessible via the internet. This was a fun project, however you might approach it. Well done Heller.





Airfix's 1/72 Typhoon Mk.Ib receives a striking shark-mouthed livery, courtesy of **Jamie Haggio**, in what will be the first of a series of 'back to basics' builds, which cover essential modelling techniques

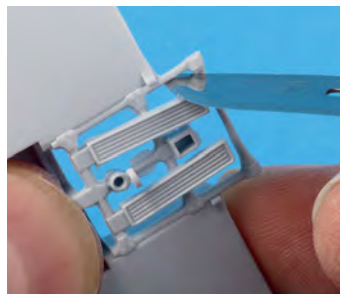
TOOTHY MUD-MOVER



▲ Good quality sprue cutters can be used right up to the edge of parts whose surface isn't going to be seen.



▲ Airfix's cockpit floor had heavy mould seams, so a Flory Models Blue sanding sponge was used on the rod sections to preserve the rounded shape.



▲ A scalpel blade is useful for neaten the inner faces of components where sanding sticks can't reach. Liquid cement then dissolved any fine residue.

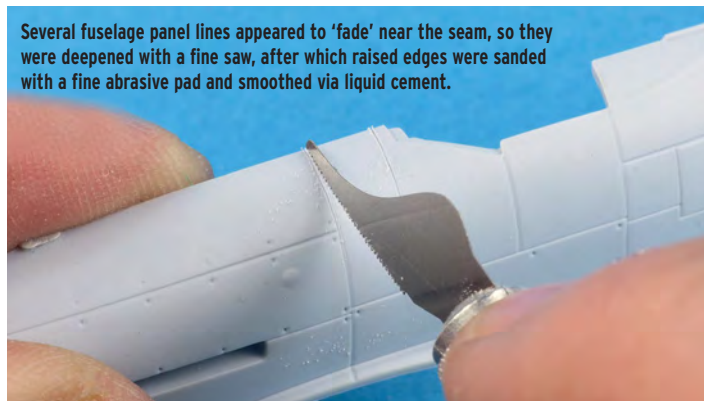
While aimed at beginners, this project should also have appeal for advanced modellers looking for a few new tips, plus readers who don't normally tackle aircraft. While Airfix's re-released 1/72 Hawker Typhoon is a relatively new kit, it does suffer from flash, plus several softly moulded parts and although the fit is fairly good, there is still a need for minor filling and fettling, so it will keep modellers on their

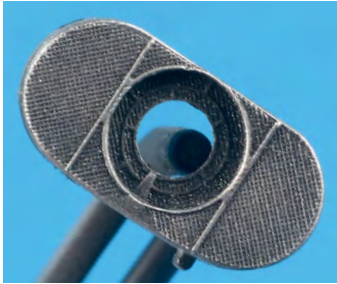
toes - even though it's a relatively straightforward project.

A good beginning

The first recommendation for any project is to study the instructions closely. Becoming familiar with the parts and construction sequence can save time and reduce frustration if the build doesn't go quite as planned. With this project, it was decided to remove the main parts from the runners first, as the attachment points were quite large and would require a fair amount of

Several fuselage panel lines appeared to 'fade' near the seam, so they were deepened with a fine saw, after which raised edges were sanded with a fine abrasive pad and smoothed via liquid cement.





▲ Airfix has moulded the radiator with fine detail. After a coat of Tamiya XF-1 Flat Black, it was then dry-brushed with Mr. Metal Color Stainless to accentuate the detail.



▲ The decal was crude compared to aftermarket items, but under a closed canopy was more than passable. Modellers wanting to open the canopy may wish to source a replacement.



▲ The fuselage halves featured integrally moulded sidewall detail. These received an Interior Green base coat, followed by a dark wash to highlight the framework.

neatening. This was achieved with a good quality set of side cutters, in this case a Zoukei-Mura product, with cuts made away from the components to avoid damaging them (see panel).

A common issue with fuselage parts is that panel lines may become more indistinct nearer to the edges, due to the moulding process - these can be reinstated with either a knife blade or a fine saw. Here the latter was used, before a Tamiya Scriber was run gently along the line to widen it slightly, ensuring a consistent appearance, and a hint of liquid

glue was applied to smooth any rough edges.

Pilot's pew

With the large parts neatened, attention turned to the cockpit. A different technique was required here as these items had mould seams and minor flash, which must be removed (see panel) along with the attachment stubs. A Flory Models Skinny Sander (www.florymodels.org) was used to remove the excess material, while a stiffer abrasive pad was employed on flatter components, which helped to preserve the

BACK TO BASICS

NEATENING TIPS

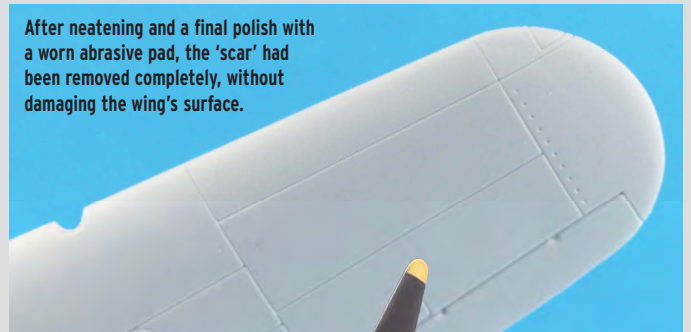


▲ Note how large the attachment point is on the wing - if the leading-edge contours are to be retained, this will require careful attention.

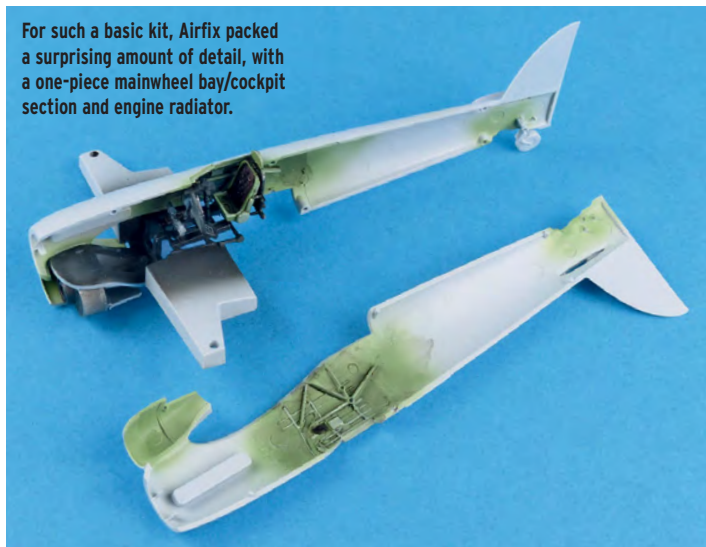


▲ A stub was left to avoid damaging the wing component and this was then reduced with increasingly fine grades of Flory Models' sanding sticks/pads and light pressure to preserve the part's contours.

After neatening and a final polish with a worn abrasive pad, the 'scar' had been removed completely, without damaging the wing's surface.



For such a basic kit, Airfix packed a surprising amount of detail, with a one-piece mainwheel bay/cockpit section and engine radiator.

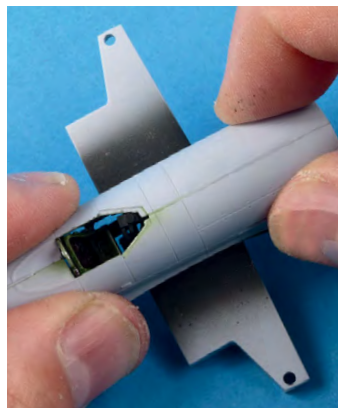


straight edges. On inner surfaces, excess material was scraped with a scalpel blade, as the various sanding sticks were too bulky. Lastly, a hint of liquid cement was used to dissolve any fine residue and smooth the surfaces.

Sometimes small items can be

painted on the runners, but this wasn't applicable here due to the parts breakdown on Airfix's Typhoon. Several sub-sections were assembled before they received base colours, in this case mostly Mr. Paint MRP-111 Interior Grey-Green (www.mrpaint.sk) and Tamiya's XF-85 Rubber Black (www.hobbyco.net). The latter is a dark blue/grey tone, which has good scale effect. A gloss coat of Mr. Hobby GX-100 Super Clear Gloss (www.albionhobbies.com) then aided application of a

▼ Liquid cement was flowed between the mated fuselage halves and after several seconds the parts were then pressed together. Melted glue then formed a raised ridge, which was sanded when fully dry.



water/Johnson's Klear/XF-61 Dark Green wash (which will settle into nooks and crannies to create false shadows) and instrument panel decals. Once everything had dried, Winsor & Newton's Galeria Matt varnish was airbrushed. Finally, AMMO-MIG's A.MIG-219 BS283 Interior Green (www.migjimenez.com) was applied carefully via a

fine brush to create highlights, with the lighter tone 'lifting' the detail further.

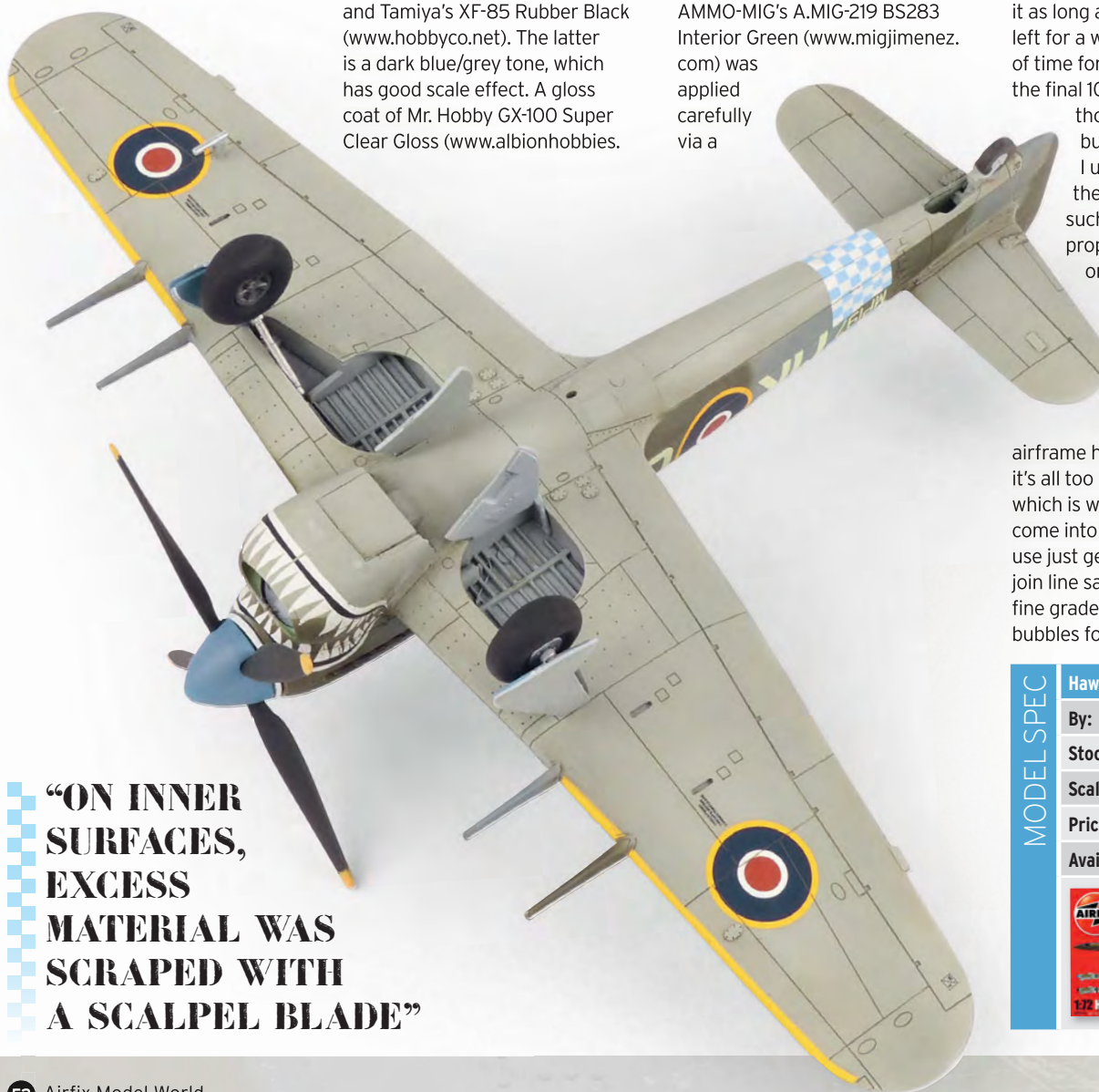
Smooth seams

With the cockpit finished, the fuselage halves could be mated and the rest of the model assembled. Modellers have different methods and tips and techniques for closing the airframe, but whichever is used, the aim is to achieve a flawless (and thus invisible) join. My usual technique is to leave a tiny hairline gap, apply liquid cement with the bottle brush, wait a few seconds for the plastic to soften and then apply pressure. The melted styrene will ooze out of the seam, leaving a raised line – it's vital this is left to harden properly, as it shrinks during this process. If the seam is neatened before it has dried fully, it will continue contracting and result in the dreaded 'ghost seam', which can appear even after painting. The recommendation is to leave it as long as possible – here, it was left for a week, which gave plenty of time for other tasks. Usually, the final 10% of the work feels as

though it takes 50% of the build time, so this is when I usually build and paint the so-called 'dangly bits', such as the undercarriage, propeller, exhausts and ordnance.

With the seam dry and all ancillaries completed, the fuselage could then be finished. As with most aircraft, the

airframe had a rounded profile and it's all too easy to create a 'flat', which is where abrasive sponges come into their own. The key is to use just gentle pressure, with the join line sanded with increasingly fine grades. Occasionally, tiny air bubbles form within the melted



“ON INNER SURFACES, EXCESS MATERIAL WAS SCRAPED WITH A SCALPEL BLADE”

MODEL SPEC

Hawker Typhoon Mk.Ib

By:	Airfix
Stock Code:	A02041A
Scale:	1/72
Price:	£9.99

Available from: www.airfix.com





styrene, so a hint of filler can be applied to treat these blemishes; once dry the same technique can be used to smooth the surface. Lastly, panel lines were restored using the same method as described previously. Dealing with fuselage seams effectively is vital for a good finish (it's arguably

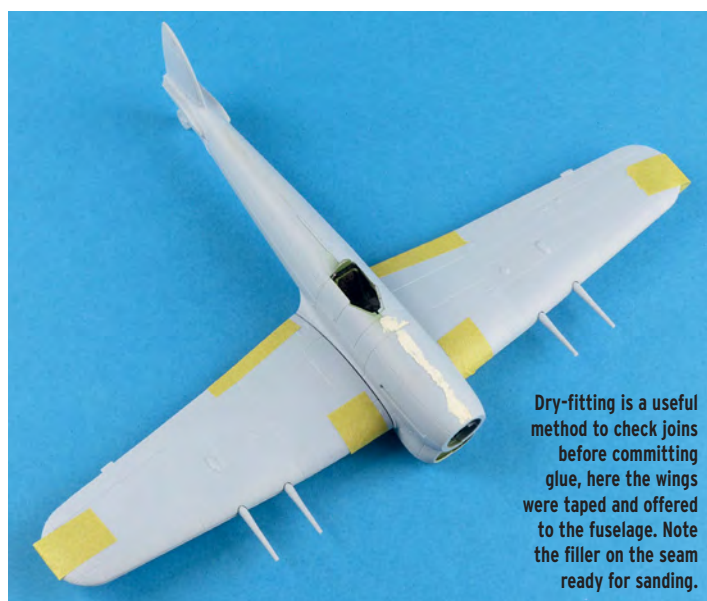
the main thing a viewer will spot straight away), so extra effort spent here will pay off later.

Mainplane magic

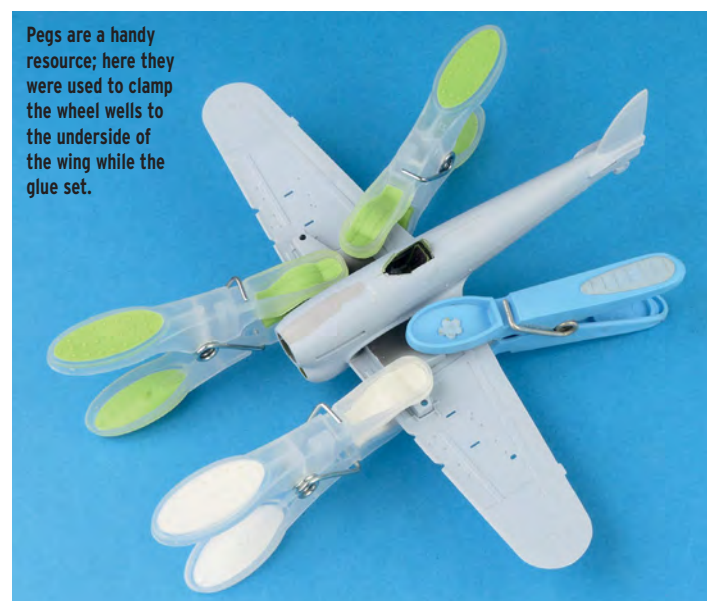
Airfix suggested a novel way of attaching the wings; first, the wheel well was secured to the single-piece lower section (which

gave strength and rigidity to this sub-assembly), followed by the gun bays (with integrally moulded barrels and ammunition belts) before the top halves were added. The fit was satisfactory, but a slight step and a few gaps appeared, so a thin bead of Mr. Surfacer 500 was applied with a cocktail stick. When

this dried, any excess was removed via a Mr. Color Thinner-dampened cotton bud - this technique avoided the need for sanding, which could affect any surface detail. Under the fuselage/wing join, a small step and a few gaps were present; Deluxe Materials' Perfect Plastic Putty was applied and, when dry, sanded



Dry-fitting is a useful method to check joins before committing glue, here the wings were taped and offered to the fuselage. Note the filler on the seam ready for sanding.



Pegs are a handy resource; here they were used to clamp the wheel wells to the underside of the wing while the glue set.



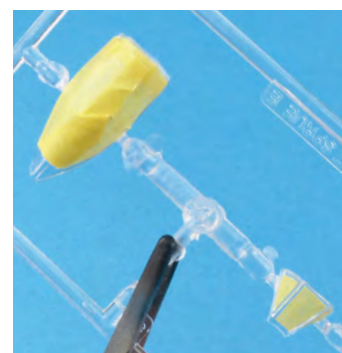
▲ Raised ridges were sanded initially with a medium/fine abrasive stick - light pressure was essential to preserve the contours - before being polished with a worn pad.



▲ Mr. Surfacer 500 was applied to the wing root with a cocktail stick to deal with a fine gap. Any excess was then removed with a thinner-soaked cotton bud for a smooth seam.

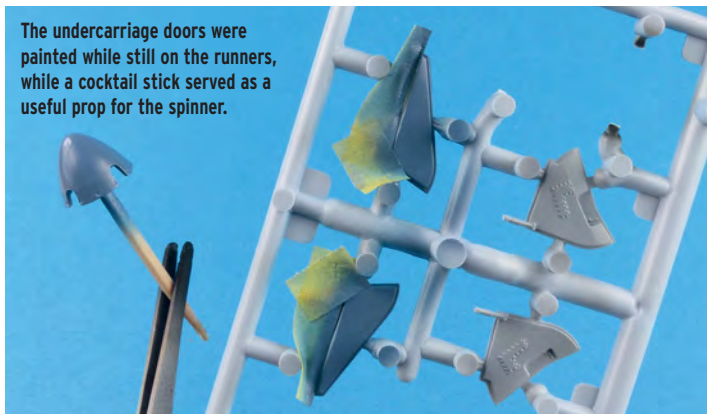


▲ Any panel lines lost during sanding were reinstated with a fine saw and Tamiya scribe, before rough edges were smoothed with a fine sanding sponge and liquid cement.



▲ The canopy was masked with Tamiya tape and a fresh scalpel blade while on the runner; once attached to the fuselage these received matt black to represent the interior colour.

The undercarriage doors were painted while still on the runners, while a cocktail stick served as a useful prop for the spinner.



to minimise the flaws. Another check revealed a small flaw near the chin radiator - after the putty was added it was neatened with a dampened cotton bud.

The final task before painting was to mask the canopy and this was achieved with a strong light (to help see the

frames), Tamiya tape and a fresh scalpel blade. Once completed, it was attached with Gator's Grip Acrylic Hobby Glue (www.gatorsmask.com). This glue is water-based, so any excess can be easily cleaned up, plus it dries hard and clear, so won't affect the clear parts.

Day fighter camouflage

It's advisable to use a primer, especially when there's filler

or resin/photo-etched parts to provide a consistent base for the top coat and to check for construction flaws - in this case Tamiya's Super Fine Grey was decanted from a spray can and mixed with Mr. Color Thinner. This aided flow through the airbrush and allowed for a smoother finish.

Tamiya paints were used exclusively for the camouflage. I'm not a fan of pre-shading as aeroplanes don't weather in this way, the finish looks contrived and one too many passes with the airbrush and it's invisible. I prefer to post-shade, which is more controllable, flexible and leaves a more realistic result, although the aim of this project was to minimise weathering and finishing techniques to concentrate on the basics. With the underside duly sprayed with diluted XF-83 Medium Sea Grey, Tamiya tape was then used to mask those surfaces, before the upper XF-82 Ocean Grey and XF-81 Dark Green 2 camouflage was applied freehand. These tones were more heavily diluted, the air pressure reduced and the airbrush used an inch or

so away to achieve a fine edge. Once outlined, the areas were then filled, working inwards each time.

Decals

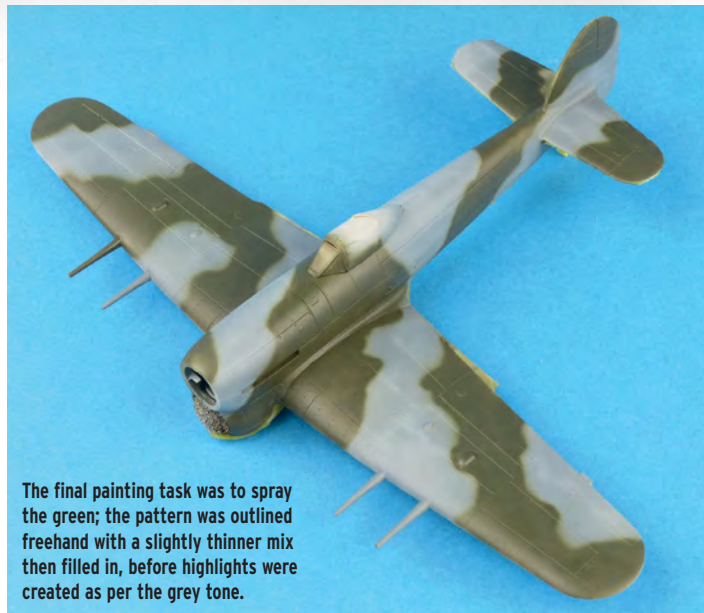
Even with a relatively smooth finish there is a risk the decals may silver (where air is trapped under the clear decal film and reflects the light). A thin gloss layer is advisable to prevent this and in this case several very thin coats of GX-100 Super Clear Gloss were sprayed. This varnish is quite thick, so a highly diluted mix was used. For a mirror-like sheen, it's advisable to use Mr. Color Leveling Thinner, which can be misted over the paint for an even glossier finish - although be careful not to overdo this, for obvious reasons. Decaling proceeded smoothly, and Airfix's markings were excellent, but AMMO-MIG's solutions were used to aid application (see panel), with the aim of these appearing to have been painted.

Replicating wear

As this project was to be basic, so the only weathering consisted of a panel line wash. A complementary



Tamiya XF-82 Ocean Grey was diluted equally with Mr. Hobby Thinner and sprayed onto the upper surfaces; highlights were created by adding white to the base tone.



The final painting task was to spray the green; the pattern was outlined freehand with a slightly thinner mix then filled in, before highlights were created as per the grey tone.

**“FOR SUCH A
BASIC KIT, AIRFIX
PACKED A SURPRISING
AMOUNT OF DETAIL”**

BACK TO BASICS

AVOIDING SILVERING



▲ A thin coat of Mr. Color GX-100 Super Clear Gloss prepared the surface for the markings, with each item's location wetted with A.MIG-2029 Decal Set.



▲ With the aid of tweezers, the decal was placed carefully into position and the backing sheet removed slowly, ensuring the marking didn't tear or break.



▲ Any excess fluid was removed with a sheet of kitchen towel - a slight pressure will push the decal into the surface detail.



▲ The same tweezers were used to coax the decal further into the panel lines, but care was needed not to use too much pressure as this could tear the surface.



▲ Finally, a softener solution such as A.MIG-2030 Decal Fix, was added liberally to the decal. This should then be left until dry, which pulls the decal into the moulded detail. This stage may need to be repeated several times depending on the surface.

tone from various AMMO-MIG Oilbrushers was mixed by eye to match the underlying colours and diluted with odourless thinner. This was brushed liberally into the engraved detail and excess removed with a kitchen towel after a period of drying. Everything was then sealed with matt varnish, which was diluted equally with isopropyl alcohol. A subtle exhaust stain was then made from a highly diluted mix of XF-1 Matt Black and XF-52 Flat Earth.

Final assembly involved attaching all the previously painted 'dangly bits' - super glue was used for the undercarriage owing to its fast drying time,

although there was still enough working time to ensure alignment. The last task was to remove the canopy masking; it was a relief the edges were clean and the glazing clear.

Keeping it simple

Airfix's 1/72 Typhoon was a basic kit, but there was enough for modellers new to the hobby to get their teeth into and for old hands to brush up on their skills. Even though my preference is to throw loads of resin and photo-etched accessories at a project, before weathering it to hell and back, this was a good 'palette cleanser' and a very enjoyable build.



While this may appear messy, the liberal application of oil was would be polished with a cloth after approximately an hour's drying time, leaving the residue in the engraved panel lines.



▲ Although the Czech Republic is landlocked, maritime subjects remain popular. This Vosper Motor Torpedo Boat was based on Airfix's 1/72 kit with detail improvements.

▲ Wearing the famous Martini sponsorship colours, this Brabham BT44B racing car from the 1975 Formula One season was built from the Tamiya 1/12 kit. (All Malcolm V Lowe)



▲ Johannes 'Hannes' Trautloft's well-known JG 54 Focke-Wulf Fw 190A was depicted on the Eastern Front using Eduard's 1/48 kit, with convincing 'winter' camouflage.

has had several recent facelifts. One of the enormous exhibition buildings was the 2019 show's venue. Despite its size, the hall was crammed with models, club stands and traders, and drew substantial numbers of visitors. The exhibition is also well-known for its large multi-class model competition, covering local and international participants, which attracted more than 1,000 entries. More information about ModellBrno can be found on the show's website at www.modellbrno.cz/en



Czech it Out!

The Czech Republic hosts several major international model shows that are well attended by modellers, clubs and traders from across Europe and beyond.

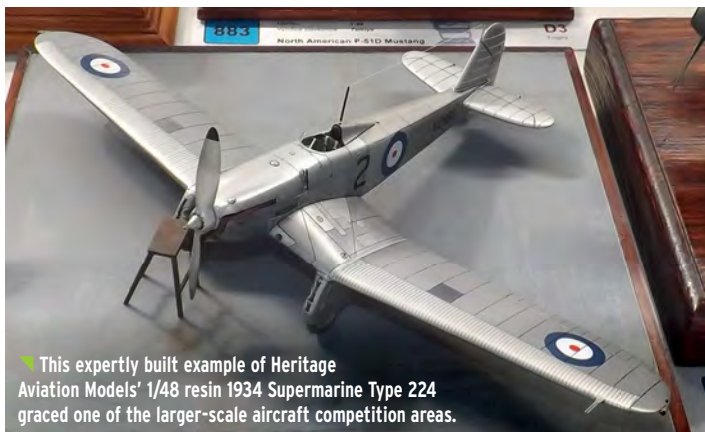
Among the biggest is the biennial ModellBrno, which took place in June 2019. Brno lies southeast of Prague and is the country's second largest city after the Czech capital. For 2019, ModellBrno was arranged by the local model

club, with co-operation from several other Czech and Slovak modelling organisations, including KPM Prostějov, KPM Bratislava and KPM Zlín, together with the support and sponsorship of local bodies, including Brno's Technické Muzeum (technical museum).

The event was staged in the city's major showground complex - the Veletrhy Brno (BVV) - also known as the Central European Exhibition Centre. It dates from the 1920s but



▲ The Airfix 1/144 Boeing 314 Clipper passenger flying boat makes up into an impressive small-scale model, as shown by this example in one of the aircraft competition classes.



▼ This expertly built example of Heritage Aviation Models' 1/48 resin 1934 Supermarine Type 224 graced one of the larger-scale aircraft competition areas.

► Representing many hours of research and detailed modelling, this period garage scene was one of the highlights of the Brno show, using Airfix's 1/12 Bentley 'Blower' as its centrepiece.





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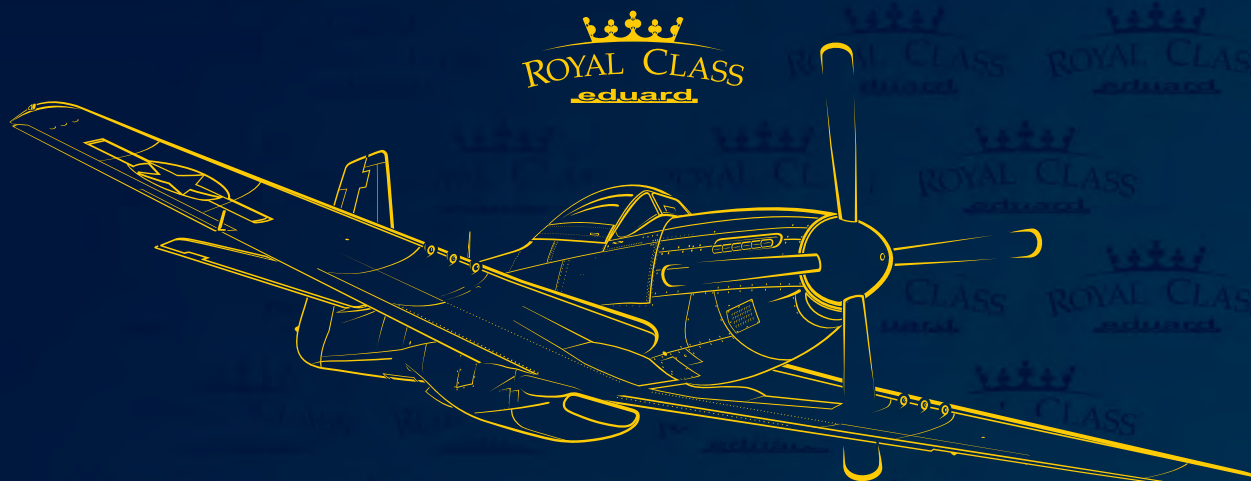
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**DECEMBER
2019
RELEASE**

#R0020 @ EDUARD.COM

Dave Oliver applies modern painting and weathering techniques to Matchbox's classic 1970s Long-Range Desert Group diorama



OLD KIT, NEW TRICKS



▲ The rather battered box, with its evocative artwork and price sticker for the pocket-money-friendly £1.26. Moulded in three shades of plastic, it proudly proclaimed: 'No paint required!'

The somewhat clichéd phrase “nostalgia isn't what it used to be” can also be applied to certain older kits.

What was once cutting-edge in terms of detail and accuracy becomes old hat over time and despite the sentimental value of building an old kit, quite often, the deficiencies compared with modern offerings become glaringly obvious. Bearing this in mind, I approached building Matchbox's 1979 LRDG 30cwt Chevrolet and Willy's Jeep (since re-released by Revell) with trepidation. I had fond memories of building the same model at a young age - the addition of a detailed diorama base and figures were both very appealing at the time. Furthermore, a range of stowage options was supplied, creating a very eye-catching scene straight from the box.

Having discussed the merits of the various Matchbox diorama kits with several members of my local model club, I was pleasantly surprised when someone found the Long-Range Desert Group (LRDG) set in their stash. The box was a little worse for wear, but thankfully all the parts were present, the evocative box art and the original price tag for the princely sum of £1.37 brought the memories flooding back. Any temptation to update it was overruled by both the high level of detail and a desire rely purely on modern techniques to get the most from the subject. These vehicle types also featured heavily in childhood comics, with tales of the LRDG's daring exploits in North Africa, such as raids on Italian positions at Kufra (from where they later operated) in Libya during 1940.

Road watch

The diminutive Willy's Jeep was the first item built. The level of accuracy indicated the designers at Matchbox had certainly done their homework, with details such as the radiator cut-outs and water condenser being

all present and correct. The clearly presented instructions and logical assembly steps made construction relatively straightforward, but personal preference dictated some interior items, such as the figures and steering wheel were left unsecured to facilitate painting them later. Conversely, items of stowage, such as jerrycans, were glued to the model to make painting these small components easier.

Unfortunately, the wheels on the jeep were somewhat disappointing; the tread was excellent, but the hubs proved to be a poor fit, requiring much fettling to sit flush with the tyre sidewalls. Furthermore, the design seemed to bear little relation to the real vehicle, perhaps due to moulding techniques available at the time (the kit was first released in 1979). Thankfully, their appearance was somewhat camouflaged by later weathering.

Lost in Libya

Once the assembly stage was completed, the model received a coat of Tamiya 87064 Grey



▲ The figures were primed with Chaos Black to help form a contrast with the subsequent flesh tones and uniform colours. Minor modifications were required to get them to sit realistically in the vehicles.



▲ Uniforms were painted with a selection of greens and khaki shades, blended to make each figure appear subtly different. The flesh tones came from the 70.119 Face Painting set and were highlighted with a Reikland Fleshshade wash.

TINY CANVAS

Painting such a small vehicle presented a challenge, many techniques such as post-shading had to be done with great care so as not to overwhelm the base colours.



▲ The jeep displayed a high degree of detail – the wheels were perhaps slightly inaccurate and out of scale, but despite its age this was the only major issue on an otherwise impressive kit.



▲ Securing the stowage, armament and figures enlivened the small model considerably; once test-fitted, they were removed and painted separately.



▲ Tyres, seats and stowage were painted after the Sand Grey base coat, which ensured these items blended naturally with the overall finish, something that could be an issue, especially at smaller scales.



▲ With other subtle details painted, such as the jerrycans, a brown wash was applied, this accentuated the moulded detail and acted as a filter, unifying the underlying tones.

FIRM FOUNDATIONS

Matchbox's two-tone base brought back many happy memories and provided a suitably atmospheric setting. Despite the moulding appearing slightly crude when compared with modern offerings, it was a cut above the rather basic vac-form alternatives available at the time.



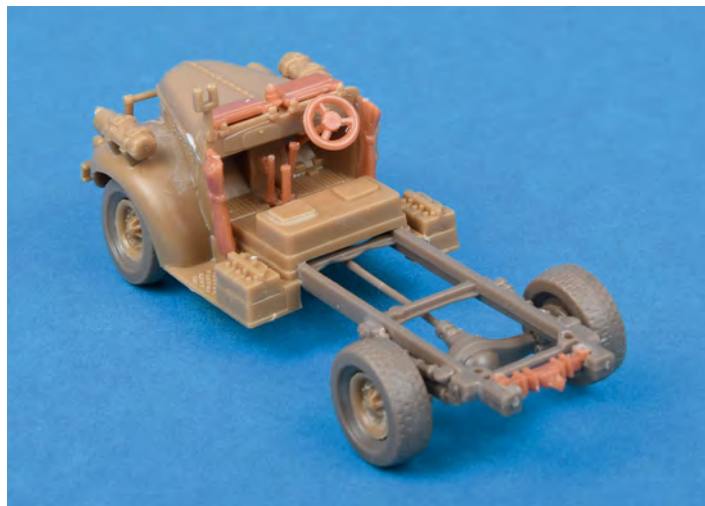
▲ The base came in two sections; the groundwork displayed an acceptable level of moulded detail, with subtle features, such as bomb craters and ammunition crates, to paint and weather.



▲ A large brush was used to apply the Citadel Tallarn Sand base coat, with the bricks and rubble also hand painted. The separate wall section was airbrushed with UA737 Worn Brick.



▲ Gradually all detail was painted and weathered, and the wall secured to the base. A generous coating of Armageddon Dust created an appropriate patina.



▲ The level of moulded detail present in this 40-year-old kit came as a pleasant surprise and included such tiny parts as the gear lever and handbrake.

Primer. The kit's colour guide gave just vague indications of the overall sand tones, while online reference photos showed a wide variation in the overall hue, so it was decided to create a bespoke shade. Lifecolor's UF901 IDF Sand Grey 1, mixed with a small amount of the firm's LC16 Raw Sienna created a suitable match, this was then applied by airbrush, with subtly darkened and lightened coats sprayed on subsequently for a post-shade effect. Once dry, the various items of stowage were then hand-painted - the advantage of having the base coat ensured these items then 'merged' with the overall vehicle colours. Light chipping was applied via UA022 Dark Grey in areas of wear, such as the leading edge of the bonnet and wheel arches, with

the process repeated at the end of the weathering stage.

MIG Productions P221 Brown was utilised as an overall wash and filter for the vehicle. Heavier applications were added around the wheel arches and crew compartment, before AMMO-MIG Oilbrusher A.MIG-3517 Buff and A.MIG-3500 Black pin washes accentuated individual details. With the crew figures in place, along with all weapons and stowage, the model was airbrushed with a coat of heavily diluted XF-57 Buff, before a coating of Lifecolor PG102 Sinai Sand and PG103 Lebanon Dust was brushed onto the surfaces.

Out of the box

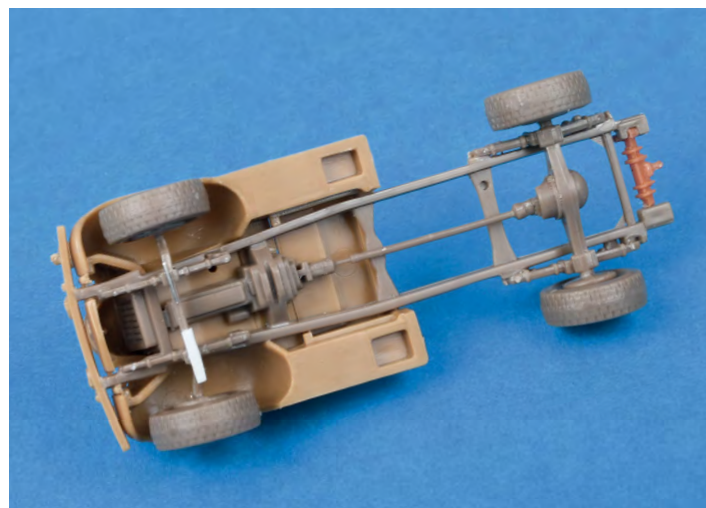
Matchbox's desert vignette base was a wonderful inclusion and one of the main reasons

After being painted a suitable sandy tone and weathered, the addition of two crew figures completed the Jeep.





▲ With the crew, stowage and armament dry-fitted, the build started to come together. Other storage items were added subsequently, creating a suitably lived-in appearance.



▲ The delicate steering mechanism required additional strengthening after the front wheels were repositioned to match the base contours.

“THE KIT WAS FIRST RELEASED IN 1979”



unattached to facilitate subsequent painting and weathering process. The base received a brush coat

of Citadel Zandri Dust, while the wall was airbrushed with UA737 Worn Brick, individual stones were then picked out with a lightened tone, before the mortar was painted with

UA739 Broken Plaster. Various crates, beams and a sign were then coloured with a selection of tones from an LC-CS20 Weathered Wood Set, while other pieces of debris were highlighted to provide points of interest - the sign had a hand- ▶

I enjoyed the set so much as a child. The skills involved in making such a detailed scene from scratch were beyond my abilities at the time, so it was a great help in providing a realistic setting for the finished vehicles.

Levels of moulded detail were impressive, from the realistic tyre tracks in the sand to the suitably war-torn building, complete with rubble and debris - much thought had obviously gone into its composition, and this provided an eye-catching setting. Once primed, I decided to leave the separate wall section

MODEL SPEC

LRDG 30cwt Chevrolet and Willy's Jeep

By: Matchbox

Stock Code: PK173

Scale: 1/76

Price: €9.05

Available from: Revell stockists



▲ The rear cargo bay was left off the model to better facilitate priming and painting. The level of detail in the chassis, drive train and suspension sub-assemblies is clearly visible.

APPLIED KNOWLEDGE

When building the Chevrolet truck, lessons learnt from constructing, painting and weathering the jeep were put to good use.



▲ After the initial Sand Grey 1 layer, a darkened shade was applied on the vehicle sides to add a degree of colour modulation, while a lighter mix was airbrushed on horizontal surfaces.



▲ Highlights were then added to the edges of the cargo bay and details, such as straps and hinges. The tyres were base coated and accentuated with UA733 Tyre Black.



▲ The distinctive camouflage was sprayed at low pressure, using Hataka's Grey Blue, with the airbrush held close to the model at the same angle to achieve a consistent result.



▲ With most of the stowage attached and smaller details painted, the model received a brown wash to enhance the moulded detail and provide a filter to unify the previous tones.

painted 'Cairo' legend added for an historical reference.

Sand ship

One of the project highlights was constructing and painting the superbly detailed Chevrolet truck. A wealth of storage options was provided, from bed rolls to ammo crates, as the kit contained everything needed to create a suitably loaded vehicle. The figures also deserve special mention as the inclusion of such items (especially on a small-scale kit) was a rarity at the time. Their poses were realistic, with the only criticism being none of them sported any Lawrence of Arabia-style headgear.

I chose to leave the rear of the cab and the cargo bay separate during initial painting. This enabled the base coat to be airbrushed and the interior to be weathered without any

obstructions. The front wheels were repositioned to follow the contours of the terrain, which required gluing several plastic and wire strips in place to secure

the delicate styrene parts, apart from these minor modifications (to aid its incorporation onto the base), the rest of the vehicle, in keeping with the whole project,

was built out of the box.

It was primed as per the jeep, after which a slightly paler hue of UF901 IDF Sand Grey 1 was applied to achieve a subtle contrast with the smaller vehicle. Post-shading was also airbrushed, with a lightened mix of the base coat before the camouflage was added. Establishing the correct colour for this distinctive scheme proved to be rather painstaking, with many sources suggesting a wide variety of tonal matches. In the end, Hataka's HTK-A171 Grey Blue (from its HTK-AS34 IDF Air Force Set) was utilised as this appeared a close match to the suggested shade. Applied at low pressure, with the airbrush held close to the model, to create a realistic feathered pattern, after which the centre of each section was highlighted with a lightened coat of the same colour.

As with the Jeep, the crew figures, weapons and stowage enlivened the 30cwt Chevrolet considerably.



**"LEVELS OF MOULDED
DETAIL WERE
IMPRESSIVE"**



Once completed, the vehicle was weathered with the same products as the jeep, before the stowage, armament and figures were added - despite a few last-

minute corrections to the paint, the vehicle was finished.

Ice cold in Alex

With the vehicles and base completed, XF-52 Buff was dusted over everything. Care must be taken not to overdo this effect, so the paint was diluted to a 1:7 ratio with thinners, and the airbrush was kept moving to prevent 'flooding' and allow the base tones to be visible. Pigments from the SPG01 Israel Defense

Force (IDF) Combo Set were then applied to areas, such as the tyre tracks, wheels and sides of the vehicles to produce a suitably dusty appearance. Finally, a dust coat of XF-52 Buff was sprayed over the entire scene to unify the disparate elements.

Capturing Kufra

Putting the final touches to what had been an enjoyable and in equal measure a nostalgic project, it was striking how well the

Matchbox's Long-Range Desert Group 30cwt Chevrolet and Willy's Jeep had held up over time. Detail present in the parts was still commendable considering the significant advances in design and moulding techniques over the intervening years. Thankfully, this charming little set has since been re-issued by Revell, and original versions are still available online, providing a perfect way to renew anyone's flagging modelling mojo.

AMW

MATERIALS AT A GLANCE

AMMO-MIG (www.migjimenez.com)

A.MIG-3500 Black

A.MIG-3517 Buff

Citadel (www.games-workshop.com)

Armageddon Dust

Chaos Black

Reikland Fleshshade

Tallarn Sand

Zandri Dust

Hataka (www.hataka-hobby.com)

HTK-AS34 IDF Air Force

Lifecolor (www.airbrushes.com)

SPG01 IDF Combo Set

LC-CS20 Weathered Wood

LCMS07 Debris and Rubble

MIG Productions

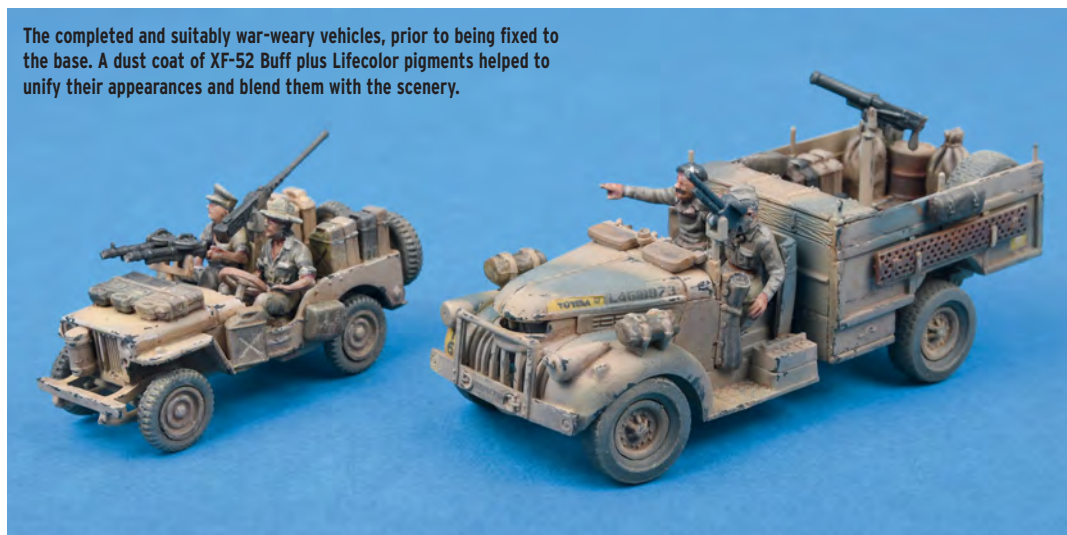
(www.migproductions.com)

P221 Brown wash

Vallejo (www.creativemodels.co.uk)

VAL70119 Face Painting

The completed and suitably war-weary vehicles, prior to being fixed to the base. A dust coat of XF-52 Buff plus Lifecolor pigments helped to unify their appearances and blend them with the scenery.





▲ "Just one more pass..." Robert McDonald matched Bandai's 1/144 AT-AT with the firm's AT-ST and Snowspeeder twin set to recreate a pivotal scene from *The Empire Strikes Back*, all displayed on a homemade base.

Paraphrasing Jane Austen: "It is a truth universally acknowledged, that a modeller on arrival at a show, must be in want of a bacon buttie" such was the temptation of the scent wafting through the corridors at the Biggleswade event.

That was certainly the case at IPMS Chiltern's show and served the dual purpose of sating hunger pangs and giving another location for modellers to meet and chat about their builds, purchases and anything else to do with the hobby. There was much to enjoy at the show's usual venue at the Weatherley Centre, with traders and club/special interest group displays spread throughout the building. The hosts made everyone welcome, along with a healthy amount of banter, and the atmosphere was relaxed and friendly throughout. While this isn't one of the largest shows, it's definitely one of the more enjoyable events, with a pleasing mix of traders/exhibitors. It would be the ideal venue for someone wanting to gain an insight into the hobby. **Stu Fone**

AMW

Wonderful Weatherley



▲ Mike Tayt's busy Typhoon re-arming diorama on The Big Stuff stand featured Airfix's 1/24 kit as a centrepiece, with a Heller 'petit gris' tractor plus Tamiya and Barracuda figures.



▲ Obtaining a smooth finish on a car model can be a challenge, but Mildenhall's Rick Smith achieved a flawless sheen on his Hasegawa 1/24 Ferrari 250 GTR Testarossa.



▲ Kit Form Services' 1/24 vehicles are impressive kits; Fenland and Spalding's Dale Sharman enhanced the basic kit with scratch-built piping for the exposed engine/transmission.



▲ Steve Abbot's Tamiya 1/48 P-51D Mustang was enhanced with Eduard's cockpit set and Lifelike decals to portray *Contrary Mary*, a colourful 84th Fighter Squadron airframe.

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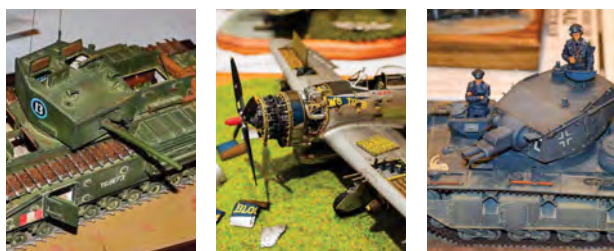


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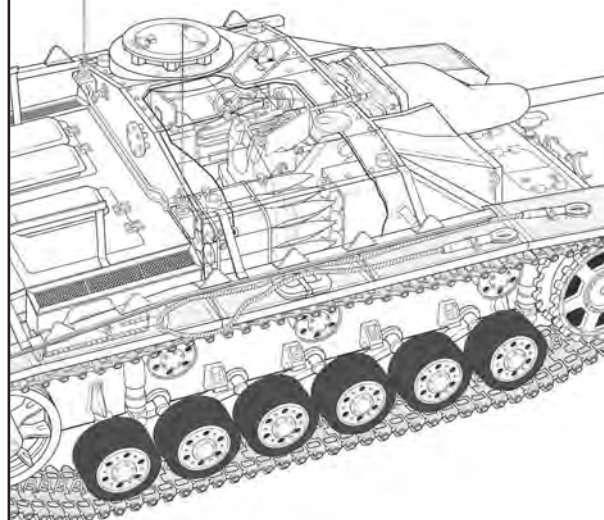
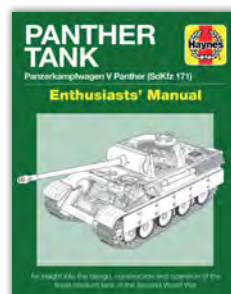
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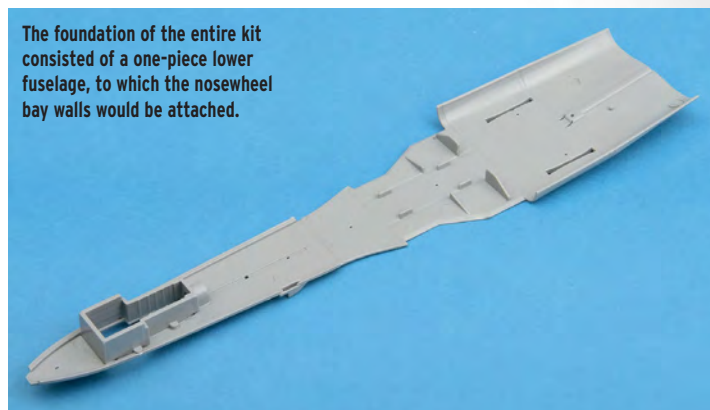


SWING-WING STORM



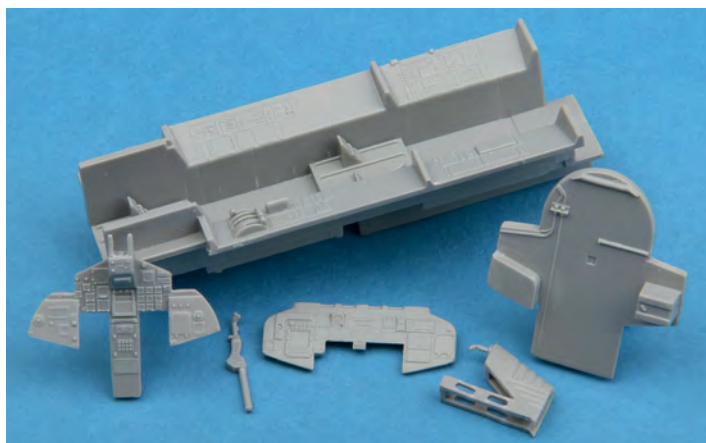
With Revell's 1/48 Tornado GR.4 as a basis, **Chris Jones** makes a series of modifications to represent the final state of RAF airframe development before the type was retired

The foundation of the entire kit consisted of a one-piece lower fuselage, to which the nosewheel bay walls would be attached.

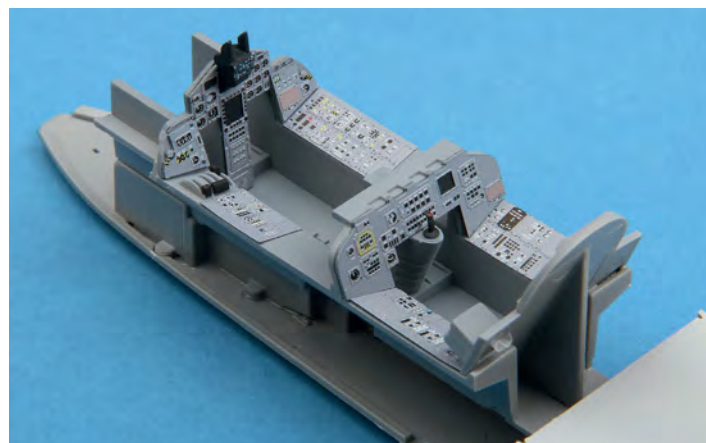


Growing up, the Panavia Tornado seemed the epitome of the RAF: they entered service before I was born and were not retired from front line use until I reached the 'grand old age' of 32.

Inspiration for this build came from watching atmospheric news footage of the type involved in Operation Shader during April 2018, taking off from RAF Akrotiri, Cyprus, to launch Storm Shadow cruise missiles at various targets. The aircraft were deployed in co-ordination with American and French forces as part of the international response to the Syrian regime's chemical weapon attacks on its own civilian population. Thankfully, though, the Tornado never had to fight the war for which it was designed: flying at tree top height in an apocalyptic



▲ Revell's cockpit parts were extremely well rendered, a boon to those wishing to take the time to brush-paint the detail.



▲ Despite this, an Eduard PE cockpit set was used to save time on this project, with the panels matching the sidewall tones closely.



▲ Outer wing pylons in Revell's Tornados were found to represent German-style fittings, so they were modified with plastic card to represent those carried by RAF machines.

clash between NATO and Warsaw Pact forces during a potential World War Three in Europe.

By the time of its retirement, the Tornado had come full circle in many ways. Its initial combat

deployment with the RAF was during the Gulf War, with use alongside coalition forces in Operation Granby over Iraq in 1991. This meant it was fitting to bow out in 2019 after being involved



▲ CMK's resin seats were a definite improvement on the skinny styrene examples. Rather than use metal harnesses, buckles were removed, and Tamiya tape used instead.

MODEL SPEC

Panavia Tornado GR.4

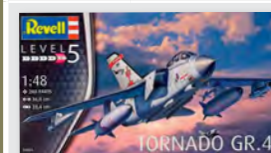
By: Revell

Stock Code: 04924

Scale: 1/48

Price: £29.99

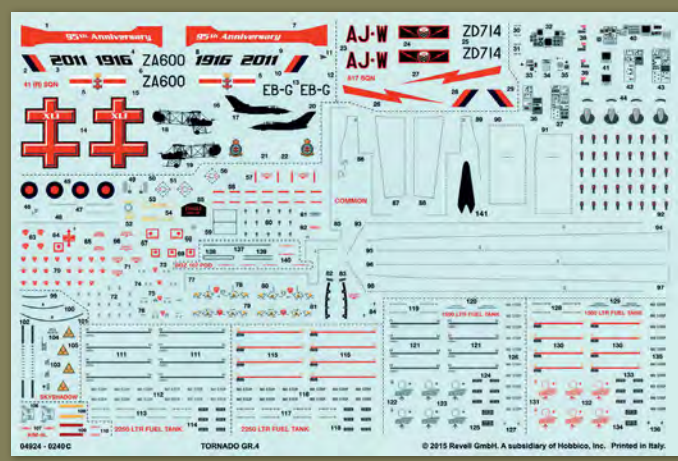
Available from: Revell stockists



KIT OPTIONS

Revell's comprehensive decal sheet supplied markings for two airframes and full airframe stencilling; the latter also included items for the various underwing stores such as Sky Shadow and BOZ-107 pods, AIM-9L Sidewinders plus hi- and low-vis examples for the drop tanks. The two choices are:

- ZA600/EB-G, 41 (R) Test and Evaluation Squadron, RAF Coningsby, 2011 (95th anniversary scheme)
- ZD714/AJ-W, 617 Squadron, RAF Lossiemouth, 2008



in similar efforts on Operation Shader, flying with another coalition force over both Syria and Iraq. Despite having always loved the 'swing-wing marvel', the emotion levels felt when witnessing the farewell flypast over the Imperial War Museum Duxford on February 20, 2019 were potent enough to catch one off guard. This experience proved the final push to press on with long-held plans to build Revell's 1/48 offering.

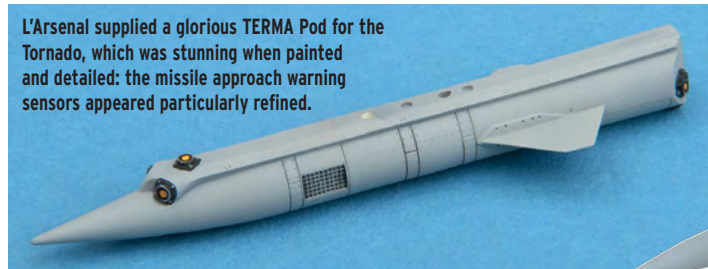
Polarised opinions

So far, Revell's well-known 1/48 tooling has appeared as German Interdictor/Strike (IDS), RAF GR.4 and F3 machines; previous reviews were either broadly positive or negative, so it was intriguing to gain personal experience of the kit. If built as supplied, the model would represent the early stages of GR.4 development, including under-fuselage pylons and nose fairings for British airframes.



▲ The additional detail did not prevent the pylons being attached the wrong way round - BOL rails and ASRAAMS were added using parts from Hasegawa and Revell kits respectively.

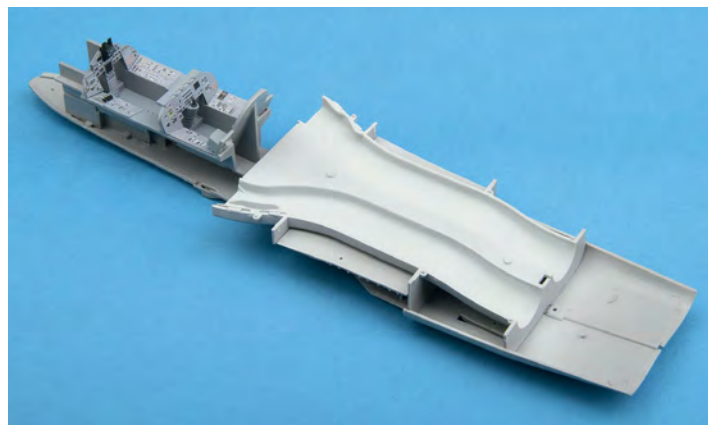
L'Arsenal supplied a glorious TERMA Pod for the Tornado, which was stunning when painted and detailed: the missile approach warning sensors appeared particularly refined.



The main difference from the IDS boxing is a new runner with a changed forward spine incorporating the GR.4's circular GPS antenna and revised access panels, plus a Forward Looking Infra-Red (FLIR) and under-nose Laser Range-Finder and Marked-Target Seeker (LRMTS) fairings. These are found on all current RAF 'mud-movers', but not on German airframes. One other feature missing from other offerings, but included in Revell's GR.4 and F.3 kits, is the inclusion of the massive 2,250 lit 'Hindenburg' drop tanks.



▲ Storm Shadow missiles were sourced from a Revell Eurofighter kit but the dorsal fairing appeared too thin, so these were replaced by resin components from an Eduard set.



▲ The cockpit, mainwheel well and intake trunking were added on to the lower fuselage component; this was the main component change from the F.3 version.

Everything else was common to both GR.4 and IDS boxings: this included the outboard pylons, which were representative of the latter variant, so would require modification for an RAF airframe. One other point of interest was the Tornado F.3 boxing also included all the extra parts that come in the GR.4 kit. This means that if the intrepid modeller has an IDS in the stash, the relevant RAF bomber components can be obtained from the fighter version for a simple conversion.

Ultimate updates

As mentioned, Revell's GR.4 represented the early stage of the type's development; by the end of its RAF service career there were multiple differences between the final airframes and their initial incarnations. Several changes were required to represent an aircraft from the April 2018 mission (namely ZA585/054). Early GR.4s featured standard rails for self-defence AIM-9 Sidewinders, but in later years, these were replaced by units equipped with Swedish BOL chaff/flare dispensers. These parts were sourced from Hasegawa's 1/48 Harrier GR.7 kit, while

ASRAAMS and Storm Shadow missiles came from Revell's 1/48 Eurofighter, with dorsal fairings on the latter coming from an Eduard aftermarket set. Aside from Operations Telic and Ellamy (Iraq and Libya respectively), the main threat on recent deployments came from shoulder-launched surface-to-air missiles, which





the aircraft all-round protection.

The last major difference between early and late GR.4 airframes concerned the placement of aerials: frustratingly, there was little information available on public domains, so photos were the sole reference for their location. It appeared that the single aerial under the nose was replaced by a smooth fairing, while another smooth bump and a petal-shaped arrangement of circular discs replaced double aerials on the spine. These were scratch-built from plastic card and rod, although the nose fairing was, frustratingly, a best guess affair, owing to the scarcity of quality photos. The spine modifications were fully accurate, though, thanks to



ASSORTED EXTRAS

A range of aftermarket parts and scavenging from other kits was required to build and enhance the supplied items to represent a late model Tornado GR.4:

Eduard (www.eduard.com)
EDFE757 Tornado GR.4 interior (Zoom)
648222 Storm Shadow

CMK (www.cmkkits.com)
Q48 231 Martin-Baker Mk10A seats

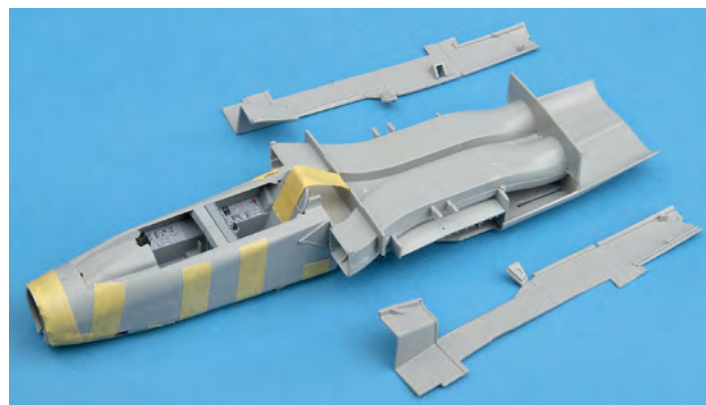
Master (www.master-model.pl)
AM-48-032 Pitot and AOA probes

L'Arsenal (www.larsenal.com)
AC 48 54 Tornado TERMA pod

Revell (www.revell.de/en)
1/48 Eurofighter Typhoon single-seater
AIM-132 ASRAAM
MBDA Storm Shadow

Hasegawa (www.amerang.co.uk)
1/48 Harrier GR.7
BOL-equipped Sidewinder rails

typically used infra-red guidance. An electronic countermeasures (ECM) pod is of little use against such weapons, as these devices are designed to deal with radar-based threats. The Sky Shadow was, therefore, often swapped for the airframe-specific TERMA pod (RAF Harriers had a pod of different design from the same firm), as this featured 360° missile approach warning sensors and flare dispensers angled forwards, downwards and to the side. When combined with the BOZ-107, it gave



▲ With the nose and intake halves together, the next step was to attach the fuselage side walls: alignment was generally good, with masking tape used to hold everything tightly while the glue dried.



▲ Wings were assembled around a spar and the pivot mechanism. The kit's engineering here was excellent, resulting in a particularly sturdy fit.



It was not realised initially that the nose cone did not attach on a panel line. Furthermore, the wing glove fairings required internal modification before they would fit correctly.



**“STORM SHADOW MISSILES
WERE SOURCED FROM A
REVELL EUROFIGHTER KIT”**

“A BLACK PENCIL WAS USED TO ADD MARKS FROM THE RUBBER SEALING PLATES”



the sole photo depicting the final arrangement, found in the Duke Hawkins Panavia Tornado book (see panel).

Panavia puzzle

At first glance, Revell's designers appear to have a soft spot for jigsaws, as the airframe component breakdown resembled such a puzzle. It soon became clear, however, that this was to allow universal moulds to cover as many variants as possible, with various inserts to accommodate differences between the GR.4

and F.3 boxings. For example, the foundation of the entire airframe was a single-piece lower fuselage, which allowed Revell simply to swap this part for fighter or bomber versions. Despite the gorgeous moulded detail in the cockpit, it was sanded to make way for Eduard's photo-etched (PE) metal items, predominantly to save time hand-painting the instruments. After constructing the forward nose section, intake trunking and mainwheel well, these parts formed an initial sub-assembly

with the lower fuselage piece.

The next stage was to add the fuselage side walls, before the wings were assembled around the spar-and-pivot mechanism, which allowed the upper fuselage, intakes and spine to be secured. Then, the wing gloves, rear fuselage, engine and tail were attached, before various slats, flaps and spoilers were fixed to the mainplanes: although it is easy to describe the construction sequence in short order, the actual process was more complex. Test fitting and fettling was required in several areas, such

as the intakes and wing gloves, while the air brakes were also difficult to fit closed and level with the fuselage. When it came to the wings, the leading-edge slats would not sit flush, either, and the flaps had to be separated into individual sections to ensure a neat fit.

A vital point to note was the nose cone and intake side walls did not follow natural panel lines: it appeared easy to get caught out by this fact and not to realise it until later in the build, by which time rectification would be impossible. In fairness, though, the fit in



Moulded detail on the parts provided for exhaust nozzles and flame holders was excellent and responded well to painting and weathering.



▲ Attachment of the flaps in the closed position was a challenging process; although supplied as a unitary piece, it was better to fit each separately for a flush join with the wing.



A great deal of masking was required for various panels; afterwards the airframe received a gloss coat which formed a smooth base for Alclad-treated engine areas.



▲ A variety of clear-coat shades was used to replicate the spectral heat staining on the thrust reverser buckets.

several areas was excellent - for example, the area comprising nose halves, side walls, upper and lower fuselage decking was exceptional - but other areas required more attention and effort. The easiest approach was to spread construction over several



sessions, with components secured via tape during the drying time, then moving on to the next stage. The assembled airframe was left to cure for as long as possible before sanding could begin. Happily, the parts breakdown meant this process was kept to a minimum, with the main areas of focus being the wing glove leading edges, intakes and nose join; because the intake sidewall join was not on a natural panel, sanding and re-scribing this section was awkward. Beyond this, the lower intakes required filling with cyanoacrylate adhesive, as did the side join between the nose and the rest of the fuselage. There were also many seams that required Milliput Superfine White (www.milliput.com) to be applied via cocktail sticks then neatened with damp cotton buds to tidy them. Every join was sprayed with Tamiya XF-1 Flat Black (www.hobbyco.net)

to reveal flaws while numerous areas required more care and attention before being re-primed for further checks.

Going grey

The Tornado has worn several camouflage schemes in RAF service, but its final colour was overall Medium Sea Grey (MSG). This shade seems to be the harbinger of doom for British ground-attack jets, as several Buccaneers and the Harrier fleet received MSG before they were retired (arguably prematurely) in 1994 and 2011 respectively. True to tradition, the Tornados were also wearing it before ending their service and just the Jaguar force seemed to buck the trend.

In modelling terms, the paint in question was XF-83 Medium Sea Grey, mixed equally with XF-2 Flat White; despite only a single base tone, there was an extraordinary amount of masking required to deal with various panels and edges. The colour was found to be excellent but if sprayed neat appeared far too 'new', so faded applications were deemed most appropriate for scale modelling purposes. Consequently, subtle light and dark tones were applied, but as the depicted airframe, ZA585/054, seemed fairly clean in reference photos, this shading was limited accordingly. Annoyingly, though, the contrasts were so subtle they barely



▲ A pencil was used to add representations of marks from the rubber sealing plates; afterwards it was smudged and blended with a damp cotton bud.



showed up, especially on camera, so retrospectively they should have been more obvious. The wing sweep area was particularly interesting: after a final flat coat following construction, a black pencil was used to add marks from the rubber sealing plates and then, in line with reference photos, they were blended with damp cotton buds. ▶

▲ The kit decals appeared excellent and settled well onto the surface, although the 'NO STEP' footprint stencils would later be toned down by overspraying the base colour.





A 2:1 blend of XF-1 Flat Black and XF-64 Red Brown was airbrushed carefully on to the tail to represent staining from the thrust reverser.

After painting was completed, the airframe received multiple applications of Alclad's ALC-600 Aqua Gloss (www.alclad2.com), which had to be misted on gradually for best results, before applying a slightly heavier coat. After leaving it for around an hour, the model was inspected and 2,000- or 2,500-grade abrasive papers were used to sand any dust or other debris that had settled in the wet varnish, after which another layer was airbrushed. This process was repeated multiple times, as this seemed to be the best way to build up an acceptable gloss finish.

With this achieved, the smooth coat provided a perfect surface for the re-creation of metal engine sections and the panel on the fin. Rainbow-like heat stains were replicated by spraying X-27 Clear Red and X-23 Clear Blue in bands, before applying X-24 Clear Yellow, followed by XF-10 Flat Brown and lastly ALC-101 Aluminium.

Final stretch

A home-made medium grey oil wash was applied, which

accentuated all the stunning panel line detail, then it was time for decaling. The kit-supplied markings were superb but the roundels and 'NO STEP' footprint stencils appeared overly stark, so these were muted by respraying the base colour over them after they had dried.

The numbers and codes used to represent ZA585/054 were sourced from a number of Xtradecal RAF code sheets (www.hannants.co.uk), although these were actually from 1/72 scale products. After sealing the decals, a wash of Winsor & Newton Galeria Flat Varnish (www.winsornewton.com) - diluted with isopropanol alcohol (IPA) 99.9% purity - muted the airframe sheen, before the final touches were added. A custom shade of RAF Dark Camouflage Grey was used to post-shade the panel lines, while a 2:1 mix of XF-1 Flat Black and XF-64 Red Brown represented the distinctive staining on the rear fuselage and fin from the Tornado's thrust reverser. In the cockpit, a plastic card plate was used to cover the seam on the navigator's coaming, on to which

the TV tabs were attached, but the central unit appeared too long and snagged the front seat, so it was modified. The rears of the side consoles were then drilled, after which smoke-coloured invisible mending thread (available from sewing/craft shops) was employed to represent the cabling. Self-adhesive lead foil replicated air intake covers, while strips of paper were masked with de-tacked Tamiya tape and sprayed with red stripes for the remove-before flight tags. Plastic card blocks were then shaped to represent the upper surface vent blanks, while White EZ Line (www.modellingtools.co.uk) replicated the bungee cords and painted Tamiya tape formed the lower surface fabric strips. Annoyingly, it was realised too late that the inner wing pylons had the wrong side facing outwards, but this was disregarded as it could not be rectified at this late stage.

Bowing out

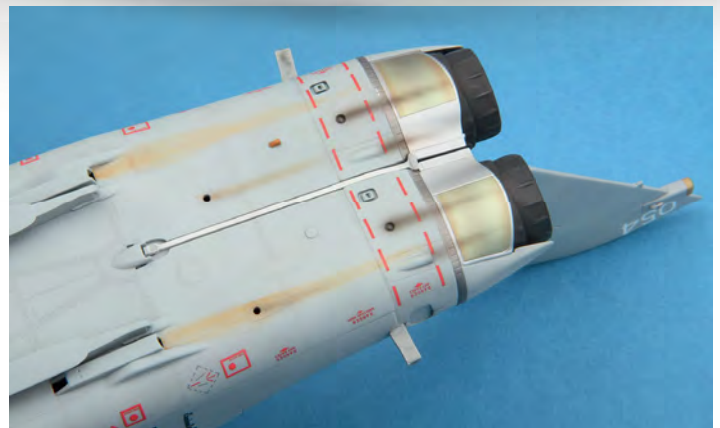
Regardless of the boxing, Revell's 1/48 Tornado kit is a major project - and the build of this example required



"PLASTIC CARD WAS USED FOR THE UPPER AIRFRAME VENTCOVERS"



▲ The final configuration of aerals on RAF Tornados replaced the double antenna arrangement and was fashioned from plastic rod and plastic card, cut and sanded shape.



▲ Oil was smeared to replicate hydraulic fluid staining, while a mix of XF-1 Flat Black and XF-64 Red Brown was sprayed for the remainder of the streaking.

even more time and dedication owing to the extra effort needed to represent the final look of the GR.4. While it is a challenge to achieve a neat finish, there are several positive points concerning this offering, particularly the way it captured the look, feel, poise and purpose of the type perfectly. The panel lines and overall detail were similarly superb. Much procrastination ensued before this modeller started to construct the kit, and it is assumed others will have done the same, so I would encourage those with one in their stash to dig it out and start building. As far as 1/48 kits of the type go, this is surely the best of the bunch: a second example is underway as a GR.1 and is waiting to receive Desert Pink in the near future.

AMW



▲ The navigator's central display unit was trimmed to fit correctly, while the side units were drilled for the addition of smoke-coloured invisible mending thread to represent cabling.



▲ With aftermarket additions including seating from CMK and Eduard PE components, the cockpit looked impressive.



▲ Plastic card was used for the upper airframe vent covers while White EZ line replicated the bungee cords.



▲ Self-adhesive lead foil was used to fashion the intake covers, while Tamiya Tape was painted to replicate fabric straps for the intake cover bungee cords.

REFERENCES

Two high-quality sources were used throughout this build:

Panavia Tornado, by R Pied and N Deboek (HMH Publications)

The Panavia Tornado: A Comprehensive Guide, IDS, ECR and ADV versions, by Andy Evans (SAM Publications), ISBN: 978-0-9955460-6-6



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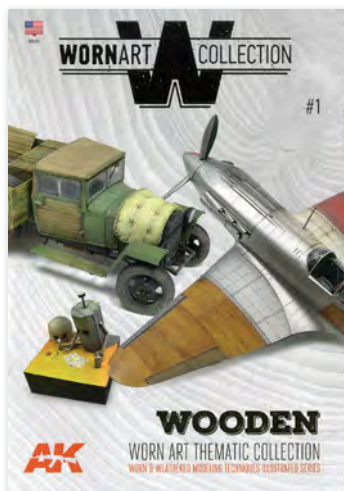


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ALL IN THE GRAIN

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Wornart Collection #1: Wooden
By: Fernando Vallejo and Murat Özgül (Ed)

EAN: 8435568306080

Price: €14.95 Format: A4

Web: www.ak-interactive.com

The first in AK Interactive's Wornart Collection focuses on replicating bare and worn wooden surfaces. It opens by explaining a series of factors that

cause certain features, such as the type of timber used, the grain and the effects of humidity on different components. There are then eight builds by noted modellers, which form the 'meat' of this volume. As usual, these are presented as step-by-step guides, with emphasis placed on wooden structures and surfaces. The less that a door, wall or window is maintained, the more pronounced the wear and tear, and there are plenty of tips on creating a chipped, peeling and water-stained finish, regardless of whether the wood has been treated or painted. Captions are extensive, offering guidance for modellers at all skill levels, accompanied by lavish photography that helps readers to visualise how these effects are achieved. There is a general weighting in favour of heavily worn surfaces, and an emphasis on AK Interactive's own products, but an almost infinite variety of finishes is possible if these techniques are tempered to varying degrees, regardless of which paints or pigments are employed. **SF**

DESERT INFLUENCE

64 pages

The Military and Police Forces of the Gulf States

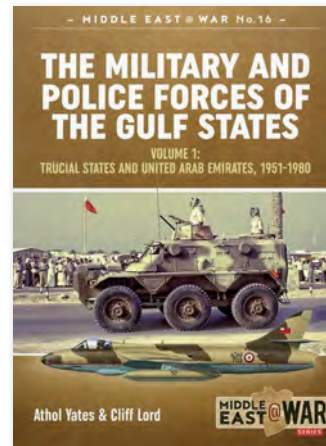
By: Athol Yates and Cliff Lord

ISBN: 978-1-912390-61-8

Price: £16.95 Format: A4

Web: casematepublishing.co.uk

Forming part of the Middle East at War series, this publication is the first in a sub-set of books dedicated to military and police forces based across the Gulf nations; it covers what is now the United Arab Emirates. The book charts how the UK initially provided military security for these Arab nations, but after its withdrawal from the area this was reduced to just supplying advisers and trainers. Each organisation has its own section, with its history, funding and management traced, while structural divisions are explained with diagrams. Photos supplement the text, with profiles of significant individuals alongside general shots of troops in service - the latter depicting a range of uniforms



and variations. Furthermore, full-colour images of insignia seen on badges, epaulets and patches provides ideal reference material for embellishments, and vehicle profiles are included. The types depicted emphasise the influence of British armed forces, with Land Rovers, Ferret and Saladin armoured cars and Hawker Hunter aircraft all making appearances. Overall, this a fascinating insight into Emirati military history. **JF**

POLISH FLYING FISH

144 pages



PZL.23 Karaś

By: Tomasz J Kopański

ISBN: 978-83-65281-63-0

Price: £17 Format: A4

Web: www.mmpbooks.biz

MMP's reference on the PZL.23 Karaś (Carpathian carp) is ideal for modellers with kits by IBG Models or Mirage Hobby. It's a one-

stop-shop on the type, covering all versions, those exported to Bulgaria, evacuated to Romania or captured and operated by Germany and Russia. There's coverage of the short operational service of the light bomber/reconnaissance aircraft with the Polish units in World War Two, before the air arm's destruction by German and Russian forces in 1939. Modellers will appreciate the 1/72 scale plans, which will be a handy ready reckoner for size and accuracy, while close-up shots of the interior and exterior should satisfy even the most ardent detail hound and provide plenty of scope for scratch-building. The final 27 pages are devoted to 3D digital images and colour profiles by Karolina Holda to help readers visualise many of the aircraft depicted in the period photos, while providing valuable information on the colours and markings worn by the type. **SF**

FIGHTING FACE-OFF

80 pages

B-52 Stratofortress vs SA-2 Guideline SAM

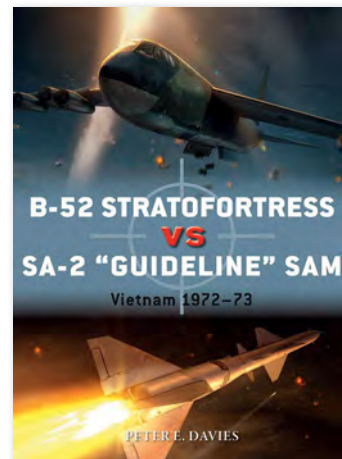
By: Peter E Davies

ISBN: 978-1-4728-2362-5

Price: £12.99 Format: 247 x 184mm

Web: www.ospreypublishing.com

Osprey's 'Duel' publication focuses on the Vietnam war during 1972-73, when the United States Air Force's B-52 Stratofortress faced the SA-2 Guideline surface-to-air missile, developed in the USSR. It lends a distinctly Cold War flavour to the history, chronology and design chapters, before the technical information comes to the fore - with tables and cutaway images revealing intricacies of both aircraft and missile. The narrative then develops into a study of the situation, supplemented by maps, routes and reconnaissance photography, while a section dedicated to 'key players' contains insights from individuals who served in the conflict. Combat information is provided for the Linebacker II operations, and



the author gives statistics and appropriate analysis based on this data. Lastly, the legacies of both subjects are examined, with SA-2s and B-52s used against each other during the 1991 Gulf War. Recent upgrades to the B-52 fleet suggest the type may serve for a full century before being retired - the story told in this publication explains the reasoning for this longevity. **JF**

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Fallschirmjäger: German Paratroopers 1937-1941

By: François Cochet

ISBN: 978-1-52674-066-3

Price: £14.99 Format: 246 x 189mm

Web: www.pen-and-sword.co.uk

Pen & Sword's treatise on Fallschirmjäger provides an insight into German airborne operations between 1937-41, offering a rich source of photographic reference material. Each chapter opens with a brief text overview, but the period imagery, which is arranged chronologically, is the real highlight.

The reader is immersed into the training regime and practice jumps, before transitioning to combat operations, where units experienced mixed fortunes. Photos convey how the drops in Norway and Belgium were highly successful, yet events in Poland proceeded so quickly that paratroopers were simply glorified airfield guards. The invasion of Crete - regarded as both the Fallschirmjäger's peak achievement and its ultimate downfall (due to heavy casualties) - is examined exhaustively, at the time it was regarded as one of the most accomplished airborne assaults. However, the consequences were significant, and during the subsequent invasion of Russia, paratrooper units served as little more than elite infantrymen. While the focus is on combat scenes, which offers modellers (and especially figure painters) inspiration galore, there are also plenty of propaganda shots. A more sombre note is provided by photos depicting events after operations, from scenes of exhausted troopers to memorials honouring those who fell in battle. **JF**

HELLENIC FLAGSHIP

69 pages

The Greek Armoured Cruiser

Georgios Averof

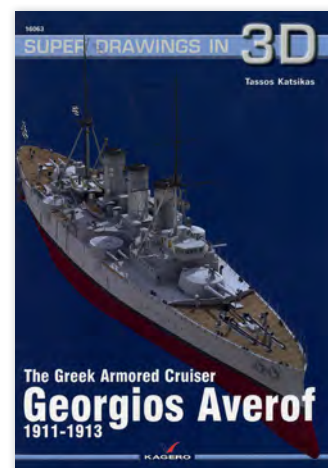
By: Tassos Katsikas

ISBN: 978-83-65437-98-3

Price: €29.96 Format: A4

Web: <https://shop.kagero.pl>

This addition to Kagero's Super Drawings offers an insight into the armoured cruiser *Georgios Averof*, with a brief history and 3D imagery of key aspects of the ship. The narrative tells the tale of how the Pisa-class vessel was ordered initially for the Marinha do Brasil (Brazilian Navy) but was instead bought by the Royal Hellenic (Greek) Navy and named after a deceased benefactor. Key differences between the ship and its Italian-operated classmates are noted, plus there is coverage of its operational history and current status as a floating museum. Digital imagery is clear and detailed, starting with overall views of the ship from several angles, before focusing on particular systems including search lights, steam boats (mounted on the deck), ship's chapel, masts and funnels.



Gun turrets and range-finders also receive attention, with the final pages showing the main armament posed as if firing a broadside. A bonus inclusion is a double-sided pull-out sheet containing plans of the ship in 1/300 scale, with larger scale drawings for weaponry. This guide is an invaluable resource for modellers wishing to build the *Georgios Averof*, particularly as there have been limited kit releases covering the ship and its class. **JF**

SWEPT-WING SURPRISE

60 pages



Mikoyan Gurevich MiG-15

By: Nikolay Yakubovich

ISBN: None Price: £16 Format: A4

Web: guidelinepublications.co.uk

The initial sighting of the Soviet Union's MiG-15 over Korea in 1950 came as something of a shock to the West and it has been a subject of interest to modellers and aviation aficionados ever since. Guideline's Warpaint 120 is devoted to this early swept-wing

jet fighter, known as the *Fagot* by NATO, and covers the aircraft's development, noting its use of German wartime designs and British engine technology. Its operational service with the Soviet Union, allied Warsaw Pact nations and satellite countries receives attention, although the absence of chapters does make finding specific aspects of the *Fagot* difficult, despite the well-written text. The photos are generally good quality, although the captions are lacking in detail. As is usual with this book series, there's a generous selection of colour profiles depicting the MiG-15 in the markings and camouflage of more than 17 air arms, with a notable emphasis on Soviet Air Force machines. These are accompanied by six pages of 1/72 scale plans, with side elevations of all major sub-types, plus six-view diagrams of the MiG-15bis fighter and two-seat MiG-15UTI *Midget* trainer, making them ideal for those with kits by Airfix, Eduard, Monogram, Trumpeter or Tamiya. **SF**

SETTING SUN

284 pages

Fall of the Japanese Empire

By: Ron Werneth

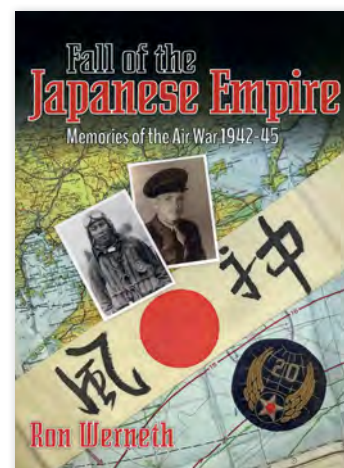
ISBN: 978-1-943492-44-2

Price: US\$59.99

Format: 290 x 224mm

Web: www.elmgrovepublishing.com

Much has been written about the Pacific air war, but Ron Werneth's meticulously researched volume approaches the events of 1942-45 from the perspective of the marines, pilots and engineers involved. There are 19 viewpoints in total, comprising ten Japanese and nine American veterans, and while the content is illuminating, it is also very sombre - all speak of the day-to-day losses and the hardships encountered, notably by those on the ground. Hearing the views and opinions of individual Japanese adds a rich vein of context to the history and fills one of the major gaps in the west's knowledge of that period. These narratives are interwoven with a collection of more than 230 photographs - some are from historical archives, but the majority are from personal albums



and have never been published previously. The author goes to great length to provide counterpoints to events, such as searching archives to determine which opponents were fought against or who shot down a particular aircraft, which further enlivens the text. Whether one is interested in the Pacific War, the US Navy, the Marine Corps or the Imperial Japanese Navy aviation operations, this is an indispensable reference guide. **SF**

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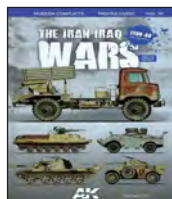
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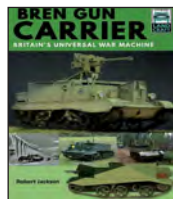
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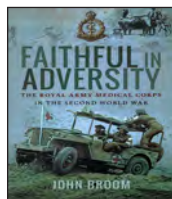
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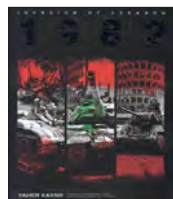
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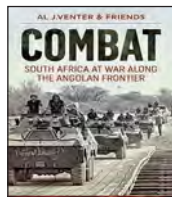
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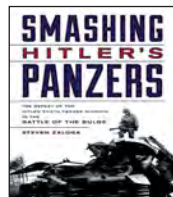
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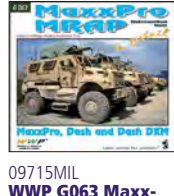
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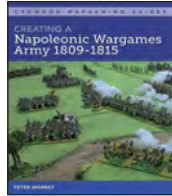
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ELECTRONIC RECCE

1/72



MiG-25 RBT 'Foxbat-B'

By: Revell Item no: 03878

Price: £24.99 Web: www.revell.de/en

Revell has re-boxed ICM's 1/72 MiG-25RBT (NATO callsign *Foxbat-B*), with a new decal set to boot. It comprises seven runners of grey styrene, with one clear frame. Several components are particularly thin, with items such as the wings feeling rather flexible. Engraved surfaces are reproduced convincingly, with subtle panel lines and neat rivets, while undercarriage components are similarly detailed. Wheels feature integrally moulded

hubs with spokes or braking apparatus on each half. Intakes and exhausts are formed from separate sub-assemblies, and these have internal ribbing, plus the cockpit is a well-appointed sub-assembly, with the moulded features on the styrene, making for a realistic 3D-effect when the decals are added. Markings for two grey schemes are provided (although there is debate whether one airframe is an RB or RBT variant), with common stencilling:

- Red 04, Soviet Air Force, Krzywa Air Base, Poland
- Red 46, Russian Air Force, 2012

ADVANCED AIR STRIKER

1/144

British Light Bomber

Fairey Battle

By: Zvezda

Item no: 6218

Price: £3.50

Web: www.hobbyco.net

This 1/144 offering from Zvezda is intended for wargamers (but is equally ideal for modellers); it's a basic snap-together kit supplied across two tan-coloured styrene runners and includes parts for a stand - there is also a card included for the gaming system *Art of Tactics Operation Barbarossa 1941*. As a smaller aircraft type in airliner scale, detail is restrained to subtle ribbing on the fuselage and fluted control surfaces. The large transparent canopy part is commendably fine, and features moulded framework, while components for both lowered/

retracted undercarriage are acceptable for the scale. There is no painting guidance supplied, but two decaling options are provided for aircraft that served in the RAF's Advanced Air Striking Force over northern France in 1939-40, with large roundels for upper surfaces, aircraft codes and serials for the fuselage:

- K9324/HA-J, 218 Sqn, RAF
- K9353/HA-B, 218 Sqn, RAF



FLYING DELTA COMBO

1/72 & 1/144

GLORIOUS GULLWING

1/72



PZL P.11a

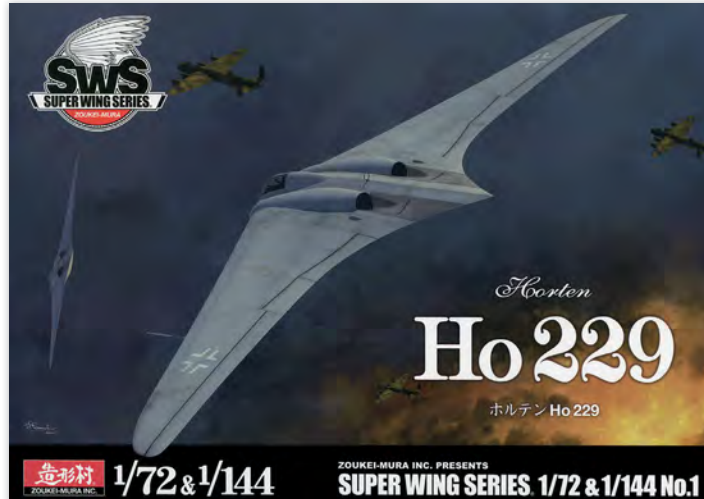
By: IBG Item no: 72517

Price: £10.40 Web: www.ibg.com.pl

Polish manufacturer IBG has made a name for itself with well-produced aircraft kits, particularly covering subjects from its homeland, and this offering of the P.11a fighter is no exception. The type's corrugated upper wing surface is replicated faithfully with fine fluting, while the nine styrene runners are supplemented with a photo-etched (PE) brass fret,

plus a pre-printed acetate sheet; these two materials are combined to produce the windscreen, with other PE components adding refinement to the cockpit and undercarriage. Overall, it's a wonderful kit and a must-have for Polish aviation fans. Three markings options are supplied:

- White 7/7.35, 112th Fighter Sqn, Zaboró, September 1939
- White 10/7.20, 114th Fighter Sqn, Poniatów, September 1939
- White 2, 113th Fighter Sqn, Warsaw, 1939



Horten Ho 229

By: Zoukei-Mura

Item no: SWS72-144-01

Price: £39.95

Web: www.volks.co.jp

Here's a neat two-in-one package from Zoukei-Mura, in the form of a 1/72 and 1/144 Ho 229, comprising ten and two styrene runners respectively - both are based on the Ho IX V2 airframe. The detail in the larger kit is an eye-opener, following a similar format to the firm's larger-scale Hortens, with a complete interior framework and bulkheads, around which the outer skins

(which feature delicate engraved panel lines) can be attached. These features are complemented by two superbly detailed Jumo 004B turbojets, well-appointed cockpit and Mk 103 cannon. The 1/144 offering is much simpler, but still oozes refinement. Generic markings are supplied for RLM 76 Light Blue or RLM 81 Brown Violet/RLM82 Light Green camouflaged airframes in both scales, including Reich Defence bands, three styles of Balkenkreuz and full airframe stencilling. This kit is available via Tiger Hobbies (www.tigerhobbies.co.uk) in the UK.

SPITTING IMAGE

1/72

**Spitfire Mk.VIII**

By: Eduard Item no: 70128

Price: £10.05 Web: www.eduard.com

Eduard's excellent Mk.VIII Spitfire returns with options for HF/F/ LF (high-, medium- and low-altitude respectively) sub-variants, comprising parts for extended, standard and clipped wing tips. The six styrene runners are supplemented by a pre-painted photo-etched metal fret offering instrumentation, seat harnesses and cockpit enhancements, plus pre-cut masks for the canopy and leading-edge lights. Moulded components

are to the firm's usual standard, with fine engraved panel lines. Six markings schemes are provided, with Australian and US Air Force options alongside RAF machines:

- HF, A5802/RG-V Grey Nurse, 457 Sqn, 80 Ftr Wg, RAAF, Dutch East Indies, 1945
- LF, MT560/ZX-D, 145 Sqn, RAF, Bellaria - Igea Marina, Italy, 1945
- F, JF470/HL-R, 31st FG, USAAF, Fano, Italy, 1944-45
- F, JF330/HB, RAF, 1943
- LF, MD280/DG-R, 155 Sqn, RAF, Burma, 1945
- LF, MT714/FT-F, 43 Sqn, RAF, Ramatuelle, France, August 1944

SCANDANAVIAN SCRAPPER

1/72

**Focke-Wulf Fw 190A-8**

By: Airfix

Item no: A01020A Price: £6.99

Web: www.airfix.com

The great value Airfix 1/72 Fw 190A-8 has been re-released with new markings for a Norway-based airframe, but otherwise the parts (held on four styrene runners) are unchanged from previous iterations. There's a well-appointed cockpit (with decals for the instrument panel), plus an accurate representation of the landing gear and associated bays; options include raised/lowered undercarriage, an open/

closed canopy and provision for a centreline-mounted drop tank. Exterior detail is represented via fine engraved panel lines and fasteners, and there are convincing renditions of the pressed metal surfaces on the ailerons, elevators and rudder. The decal sheet is superb, with full airframe stencilling and even a Spiral Schnauze for the spinner, which should simplify painting greatly. The single scheme is for a late-war machine in RLM 74/75 /76 camouflage:

- White 3, Feldwebel Martin Ullmann, 9./JG 5 'Eismeer', Herdla, Norway, May 1945

TWO-WINGED SEAGULL

1/48

**I-153 WWII China Guomintang AF Fighter**

By: ICM

Item no: 48099 Price: £15.80

Web: www.hannants.co.uk

ICM's latest quarter-scale version of the I-153 follows the same pattern as its 1/72 and 1/32 releases, offering markings for Chinese Nationalist (Guomintang) Air Force airframes. Compared to the initial iteration, there is one extra frame for the new nose ring, lower machine gun barrels and push-rod detail, as these

airframes had an open engine face. All parts on the six styrene runners are moulded beautifully, with sharply defined fastener and panel detail, complemented by delicately scalloped sections to replicate fabric-covered surfaces. A choice of underwing armament is provided, while the powerplant is a faithful replica of the Shvetsov M-92 nine-cylinder engine. There are four airframes:

- White 2706, 1940
- White 73, 1940
- White P7250, 1940
- Unidentified, 1941

PONIES ON DISPLAY

1/72

**MB-339A PAN 2018 Livery**

By: Italeri

Item no: 1418 Price: £15.99

Web: www.hobbyco.net

Supermodel's MB-339 makes another return in Italeri packaging, this time featuring two of the three runners in a rather vivid blue styrene, plus markings for the Frece Tricolori's 2018 display season. Parts appear unchanged from earlier offerings, so exterior detail is in the form of raised panel lines (although these should be simple to re-scribe, notably on the wings). Decals are

supplied for the instrument panel and side consoles, but these appear very stark, with unrealistic black/white section, all of which is visible through the crystal-clear canopy. Any of the team's 12 aircraft (with callsigns Pony 0-11) can be built as they appeared at the Italian national May Day Airshow in 2018, with all trim supplied in decal form - their opacity should be sufficient to prevent any of the underlying tones from being visible. This is a neat little kit, being accurate in shape and size and offering fairly decent value for money.

ANNIVERSARY ARMOUR

1/35



Arab T-34-85

By: Dragon Item no: 3571

Price: £59.99 Web: www.hobbyco.net

This Dragon offering is a re-boxed version of its 1/35 T-34/85, released to commemorate 50 years since the Arab-Israeli Six-Day War. It comprises 15 styrene runners, with specific items intended for a Syrian-operated vehicle. Tracks are supplied as Magic Track individual link items, plus there's a small photo-etched metal fret and a length of wire for the tow cable. Lower hull components feature

neat panel lines, while suspension and running gear are similarly well moulded, and there's a splendid DShK heavy machine gun on an anti-aircraft mount. Parts for the larger turret type fitted to the T-35/85 variant feature a textured styrene surface (replicating the cast nature of the real item), with raised locating points for other components. Two schemes depict 4BO Russian Green machines: one is a well-known T-34/85 on the Golan Heights, with the name of a Syrian martyr on the turret, the other is an unmarked tank.

COVERED FREIGHT CAR

1/35



German Gedeckter Güterwagen G10

By: Thunder Model

Item no: 35901 Price: £49.99

Web: www.thundermodel.com

Although often overshadowed by armoured vehicles, railway wagons played a significant role in military operations during World War Two, none more so than the humble box van. Thunder Model's 1/35 G10 Güterwagen (freight wagon) is a fine representation of the German 15-tonne (16.5 ton) type built from 1910 onwards. There are

nine styrene runners, three photo-etched (PE) metal frets and wiring supplied; the braking and coupling systems are particularly well appointed. Wooden surfaces are represented on the exterior panels of the van, but it would have been preferable to see this extended to the interior, which features just engraved plank lines. A full colour guide has been produced with AMMO-MIG for either Polizei Grün (Police Green) or dark red schemes, plus weathering advice alongside markings for four individual vehicles.

FIRST OF THE BREED

1/72



Renault FT 75 BS

By: Flyhawk

Item no: FH 3009 Price: £26.17

Web: www.flyhawkmodel.com

Flyhawk has released a new version of its 1/72 Renault FT tank, a type developed during World War One and often seen as the first 'modern' configuration of a track-equipped lower hull with a rotating main turret armament. This offering depicts the FT 75 BS, equipped with a short-barrelled 75mm (3in) howitzer, which benefits from a full breech

mechanism and azimuth/elevation handle. Despite the model's diminutive size, it features finely engraved panel lines while rivets are reproduced as moulded dimples. The vehicle's drive system comprises well-appointed running gear, drive chains and single-piece tracks, which are enhanced with PE. Best of all, components are supplied for two vehicles, with a pair of markings schemes also provided, although no guidance is given for unit or deployment information, so modellers will need to check references.

RETRIBUTION WEAPON

1/72



German A4/V2 Rocket

By: Revell Item no: 03309

Price: £12.99 Web: www.revell.de/en

Revell has re-boxed CMK/Special Armour's 1/72 A4/V2 rocket. Twenty-eight components are supplied across two runners. Engraved detail is impressive, with the surface featuring crisp panel lines and neat rivets, although the representation of the engine and thruster sub-assembly will be hidden when the model is completed. There are

parts to build the launcher, with options for ready-to-fire or stowed configurations - the latter includes a six-piece towing trailer, which is effectively a mini-kit by itself. Four markings schemes are supplied: a chequerboard-patterned prototype dated October 3, 1942, plus three examples in military service between 1943-45. The missile is also available as part of a larger boxing, which contains an SS-100 Gigant heavy tractor and Meillerwagen trailer (03310).

TRIPLE-TURRETTED TITAN

1/35



Soviet Medium Tank T-28

By: Zvezda Item no: 3694

Price: £32.99 Web: www.hobbyco.net

There was a time when multi-turreted tanks, such as the T-28, were seen as a viable solution to increasing firepower, but they are now viewed as an anachronism, although they are still fascinating subjects. Zvezda's 1/35 scale offering is rather busy in terms of parts count, but this helps to capture the complex suspension and structures on the real vehicle, plus allowing more detail to be depicted, such as

the main gun (with breech block) and DT machine guns, complete with drum-style magazines. No interior is supplied, but the exterior is impressive, with convincing rivets and provision for external stowage. The link-and-length tracks have the correct style of tread, while the turret antenna is supplied as a single-piece item. Markings are included for four un-numbered T-28s:

- 8th Tk Div, Lviv, 1941
- 20th Tk Div, Finland, January 1940
- 1st Heavy Tk Bde, Belorussian Military District, autumn 1936
- 10th Tk Div, Ukraine, June 1941

ANTI-AIRCRAFT DIORAMA

1/56



8.8cm FlaK 36/37 with Crew

By: Rubicon Models

Item no: 280069 Price: £23

Web: www.rubiconmodels.co.uk

This flak gun and crew may be intended for wargaming, but the levels of refinement and detail also make it ideal for modellers. It can be built as either the FlaK 36 or 37 variants and in travel (on an Sd.Anh.202 trailer) or firing configuration - an eight-man crew is supplied for the latter, and there are spare 8.8cm ammunition cases, rounds (high-explosive and

armour piercing) and a telescope and rangefinder for the battery commander. As such, all it needs is a revetment or suitable foliage to create a splendid diorama. All items are moulded crisply, with an absence of flash or blemishes, and there are options for different gun shields. The decal sheet is the highlight, though, with barrel or shield kill markings, unit and formation insignia and even rank slides and items for the crew helmets (depending on whether they are in the Wehrmacht of Luftwaffe).

DESERT CRUISER

1/72



Crusader Mk.III

By: IBG Models Item no: 72068

Price: €13 Web: www.ibg.com.pl

IBG has been quick to follow its Mk.I Crusader with the later Mk.III variant. Unsurprisingly, this new release shares three runners with the original, plus the excellent single-piece inner running gear and track components. All remaining parts are supplied on six new frames, addressing the changes to the upper hull, armament, turret shape and engine deck. The detail is excellent,

rivalling that found in larger scales, while the cleverly designed tracks mean this is suitable for modellers of most skill levels. Sand shields are supplied as photo-etched brass items, with mounting brackets and reinforcement strips in the same material. Three schemes are provided, two in overall Olive drab, while the third is in Light Stone/Dark Brown camouflage:

- T12565/2, Polish Forces in the West, UK, 1942
- White 3, 6th Armd Div, Tunisia, 1943
- T126799, North Africa, 1942

THIRD-GENERATION SOVIET

1/72



T-80UA Main Battle Tank

By: Modelcollect

Item no: UA72062 Price: US\$21.99

Web: www.modelcollect.com

While its basic styrene kits have wowed modellers with their refinement, Modelcollect has continued to enhance its offerings. This T-80UA is a prime example, offering photo-etched brass extras and a turned metal main gun barrel. The former supplies flexible mud and turret flaps, engine grilles and parts for the turret-mounted remote weapon station. All components

(supplied on 11 styrene runners) are moulded crisply, with delightful detail, Kontakt-5 reactive armour panels and Shtora-1 active protection sensors. There is a surprisingly high parts count for such a small model, but this enables the firm to include more features. Tracks are supplied in link-and-length configuration and these include guide horns on the interior surfaces, plus convincing tread patterns on the outer. A generic decal sheet is supplied with markings for Soviet/Russian Guards and standard units, plus East German and possibly Ukrainian machines.

DRY-DOCK TANKS

1/35



T35-85 112 Factory Production
By: Airfix Item no: A1361
Price: £29.99 Web: www.airfix.com

Continuing the range of re-boxed Academy kits, Airfix has released this 1/35 T-34-85 as a '112 Factory Production' machine, alluding to its place of manufacture. Components are supplied on 16 dark green styrene runners, with link-and-length tracks on a pair of black runners and engine grilles on a photo-etched brass fret. Panel lines are engraved finely, and

a standout item is the upper track lengths, which feature accurate sag across their lengths, although smaller items will require minimal treatment for flash. Alternative parts are supplied for the markings options for World War Two and Korean War machines, plus additional information is given regarding items removed on each vehicle. The choices are:

- White 342, 9th Tank Corps, Red Army, 1945
- White ČZ-211, 1st Czechoslovak Tank Brigade, 1952

SPHERICAL FUN

1/35



Soviet Ball Tank with Winter Ski
By: MiniArt
Item no: 40008 Price: £39.99
Web: www.miniart-models.com

Modellers seeking something a little different should consider MiniArt's wonderful ball-tank series, which elevates a 'what-if' subject to new levels. All the detail, refinement and moulding technology lavished on its other kits is present here, from the crisply moulded parts on 23 styrene runners, to the splendid engineering. Best of all, there's a

full interior, complete with engine and complex transmission, fuel tanks, spare ammunition, crew controls and seating for four gunners and a driver. The main cannon benefits from a convincing breech and there are also two heavy machine guns. There are six schemes, with varying styles of camouflage, from overall white to captured examples in Finnish/German liveries, while the orange-toned vehicle makes it look even more outlandish; several have patriotic slogans on the sides, along with various artwork.

RE-PURPOSED SCOUT

1/35



P 204 (f) with CDM Turret
By: ICM
Item no: 35377 Price: £15.99
Web: www.hannants.co.uk

ICM has re-released its 1/35 Panhard armoured reconnaissance vehicle as a German-operated Panzerspähwagen P 204 (f) Beutepanzer (trophy armour). This version is supplied with a CDM turret (which mounted a 47mm cannon); this is supplied on an additional runner, bringing the total count to five, plus four vinyl tyres. Surfaces feature delicate

engraved detail, with grilles and rivets having a particularly fine appearance, plus convincing tread and logos/legends on the tyres. There's a full interior, including a neat powerplant, controls and ammunition storage, making the kit ideal for a diorama in conjunction with ICM's figure range. Two schemes are supplied:

- Red 1413 *Jaguar*, 1000th Aufklärungs Abtl, 89th Inf Div, Auvergne, France, summer 1944
- Red 1412, 1000th Aufklärungs Abtl, 89th Inf Div, Auvergne, France, summer 1944

GIVING ARMOUR A LIFT

1/72



Russian Army Tank Transporter
By: Takom
Item no: 5004 Price: £42.99
Web: www.pocketbond.co.uk

Takom's MAZ-537G and ChMZAP-5247G combines the prime mover from its excellent Russian Army Tractors (5003) with a newly tooled semi-trailer. There are six styrene runners, plus two sets of nine vinyl tyres, a separate slide-moulded single-piece cab and a small photo-etched brass fret. Moulded detail is excellent, notably on the wheel hubs and engine housing, while all parts

are free from flash. The cab has a simplified interior, despite the large windscreen and side glazing, but the suspension on the tractor and trailer is superb - the latter also has a faithfully replicated gooseneck and an option for raised/lowered access ramps. Four schemes are supplied, for Afghan, Hungarian, Iranian or Russian Army machines, with camouflage varying from Russian Protective Green to two-tone desert schemes. The decal sheet supplies basic registration plates and national insignia, with most items destined for the tractor vehicle.

CORSICA CRASHER

1/24



Ford Fiesta RS WRC 2017

By: Belkits Item no: BEL-013

Price: £69.99 Web: www.belkits.com

Belgian manufacturer Belkits specialises in rally car offerings, with this version of its Ford Fiesta depicting a machine driven by Ott Tänak with Martin Järveoja in the 2017 World Rally Championship (WRC) season. It comprises the same components as previous releases: six styrene runners and a one-piece bodysheet, plus a photo-etched (PE) fret, self-adhesive chrome sections and a vinyl runner containing five

tyres and two mudguards. Moulded components are neat, with distinct items for the front and rear brakes, and fine suspension/steering assemblies, while exterior surfaces feature delicate panel lines. PE components add further refinement, with particularly convincing grilles, buckles, brake pads, and rivetted skid plates included. A large decal sheet provides markings for the vehicle that crashed out early in the 2017 Tour de Corse (Rally of Corsica), although optional parts for night-stage spotlights are inaccurate for this event.

LEVELLER AND SHAKER

1/35



ZC50C-5 Hitachi Vibratory Combined Roller

By: Hasegawa

Item no: WM02/66002

Price: £36.99

Web: www.amerang.co.uk

There haven't been many recent releases from Hasegawa, so its Hitachi ZC50C-5 is a double delight, as it represents a new genre for the firm: 1/35 construction equipment. It comprises nine styrene runners in three different colours, plus a length of vinyl tubing for hydraulic lines. This means the kit could

be built without painting, so will appeal to all levels of modelling skill. The moulded detail is to the firm's exacting standards, notably the seamless roller cylinder and well-defined driver's controls - the latter are enhanced further by the well-printed decals. A single eight-piece coverall-clad driver is supplied and the features are convincing, from the steel-capped boots to the safety helmet and hair. There's a single colour scheme for an overall orange vehicle, although pale turquoise, blue or yellow options would also be applicable.

AMERICAN HOT-ROD

1/24



'56 Chevy Custom

By: Revell Item no: 07663

Price: £29.95 Web: www.revell.de/en

Revell delivers a blast from the past in the form of a re-boxed Monogram 1956 Chevrolet custom car kit, offering new markings to accompany the otherwise unchanged components. The kit is presented on six styrene runners, with a separate seating area and bodysheet plus vinyl tyres. Despite being more than 40 years old, most parts are moulded cleanly, with little in the way of flash or sink

marks, although the chrome plates frame would benefit from being stripped and resprayed as the coating is rather thick in places. Either a custom or stock version can be built, with different engine components, suspension and harnesses supplied. The undoubted highlight is the decal sheet, which offers all the necessary trim and artwork, plus seatbelts, tyre logos, dashboard instruments and brand motifs. Colours are well defined, while the opacity appears excellent, and ten different styles of registration plate are included.

LARGE-SCALE HAULAGE

1/24



Scania R400 Streamline Flat Roof

By: Italeri Item no: 3947

Price: £54.99

Web: www.hobbyco.net

Italeri's Scania R400 high-forward-control cab truck appears to combine parts from previous releases of R144 and R620 variants. A total of eight runners are supplied alongside seven vinyl tyres and a set of chrome-plated self-adhesive stickers. The components capture the vehicle's appearance faithfully, while a hinge

mechanism allows the cab to tilt forward to reveal the engine sub-assembly. This is a standout feature, with cylinder covers, manifolds, a fanbelt and radiator added to a two-piece block and gearbox to produce a detailed representation of the V8 powerplant. The vehicle can only be configured as left-hand drive, with appropriate European registration plates supplied as decals - UK examples are also included; two French Blue schemes appear to be Scania promotional liveries.

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EMPEROR HONGWU

Zhu Yuanzhang

By: Master Box

Item no: MB24059 Price: £11.99

Web: www.creativemodels.co.uk

Zhu Yuanzhang was the founding emperor (taking the title Hongwu) of the Ming Dynasty, which ruled China between 1368 and 1644, and is the subject of this 1/24 release from Master Box; it depicts the leader at the Battle for Nanjing, with the city serving as his headquarters and capital after the victory. One light-grey styrene runner supplies 27 components, with convincing creased clothing and scale-plate armour, however moulded detail appears soft on the solid armour chest plate and boots, plus the seams will need to be tidied on the larger items.



1/24

The figure carries a guandao pole weapon (likely ceremonial), which is supplied as one piece and features a particularly fine blade, plus an additional sword in a scabbard.

ALL WRAPPED UP

1/32



German Pilot

By: Kagero

Item no: 9403203 Price: €20.90

Web: <https://shop.kagero.pl/en>

Kagero's splendid one-piece pilot figure is ideal for posing with any

Wingnut Wings German aircraft model. It depicts an aviator clad in cold weather flying gear, in the form of a lined coverall with cross-body fastener, scarf and flying helmet. The sculpting and casting are first-rate, from the convincing creases in the outer clothing to the lugubrious expression. While the price may seem slightly high, the figure comes with a 16-page manual, The Kaiser's fighter aircraft, which provides plenty of reference photos and modelling inspiration.



PETITE PLANE HANDLERS

1/76



USAAF Personnel

By: Airfix Item no: A00748V

Price: £4.99 Web: airfix.com

Airfix's 1/76 set of USAAF Personnel returns under the Vintage Classics banner, and as such features the original box artwork. A total of 42 figures are included, plus a pair of ammunition trailers, which takes the shape of two bombs. There are various poses, allowing refuelling, rearming and marshalling scenes to be produced, plus aircrew wearing lifejackets. Detail is acceptable, particularly given the age of the moulding, but this means items - including the bombs - lack finesse. There are also seam lines across the runners - the softer vinyl-type styrene will make these a challenge to remove. Despite these issues, this remains a delight, and is ideal for populating small-scale dioramas.

ONE MAN AND HIS DOG

1/35

Soldier with Sapper-dog

By: ToRo Model

Item no: 35F111 Price: €17

Web: www.toro-model.com.pl

ToRo Model has added to its range of Polish soldiers with a set containing a figure and a service animal as deployed to Afghanistan in 2011. It comprises just five components, with the main bodies of both man and dog supplied as one-piece items with separate arms and tail respectively. Once flash and casting blocks are removed, detail is completely convincing, with incredibly fine trouser hemlines and body armour storage pouches, plus a neat representation of an AK-74 assault rifle. The canine figure is the standout though, with wonderfully rendered fur, plus it wears accurate goggles and protective vest. A selection of decals also provides options for rank insignia, national patches, blood group and name tags, and cap badges.



CHARGE FILLERS

1/35



Italian Soldiers Battery Maintenance

By: Royal Model

Item no: 851

Price: €25.90

Web: www.royalmodel.eu

This two-figure ensemble is ideal for any desert vehicle maintenance scene, with bare-chested soldiers depicted in the process of refilling a large vehicle battery with either acid or de-ionised water. Each comprises five crisply cast components, with separate arms and torso; while the battery and re-supply bottle (encased in a wicker-type material) are single-piece items. Clothing - notably the boots and socks - body posture and facial expressions are realistic, and the attachment points are keyed to ensure a snug fit.

STRONG-ARM TACTICS

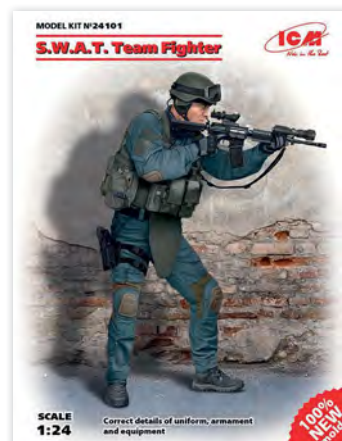
1/24

SWAT Team

By: ICM Item no: DS2401

Price: £23.60 Web: hannants.co.uk

ICM again provides a great-value package, combining its four separate SWAT team figures (24101, 102, 103 and 104) into a single box, and at less than half the combined price of the original purchases. Two members are armed with pistols, one is crouching with a slung rifle, while the second holds an armoured shield; the others are standing, with rifles aimed or at the ready. The moulding is to the firm's exacting standards, with convincing representation of the clothing, weapons (CAR-15, SIG Sauer P226 and H&K MP5) and body armour. There is an impressive level of detail, with separate equipment pouches, three different helmet types, radios and eye protection.



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TOPHATTERS AND REDCOCKS

1/48



Boeing F/A-18E Super Hornet

By: CAM-Pro

Item no: P48016

Price: US\$12

Web: www.camdecals.com

Modellers with 1/48 F/A-18E Super Hornet kits may wish to consider

CAM-Pro's gorgeous two-jet offering, which supplies decals for one airframe each from VFA-14 Tophatters and VFA-22 Fighting Redcocks. The latter is a Carrier Air Group Commander's airframe (MODEX 00 or 'double nuts'), while the former is a Squadron Commander's 'bird', both of which receive full colour markings in place of the usual grey-on-grey insignia/artwork. Printed by Microscale, the decals feature accurate colour tones, most notably on the Tophatters' artwork and livery, plus perfect register and crisp demarcations. Most of the airframe stencilling is included, with solid walkways, although modellers may wish to check references.

The schemes are:

- 166437/100/NK, Capt CB 'Animal' Williams, VFA-22 Fighting Redcocks, CVW-14, USS Ronald Reagan (CVN-76), 2006
- 165862/201/NH, Cdr BW 'Puppy' Fecht, VFA-14 Tophatters, CVW-11, USS Nimitz (CVN-68)

LIGHTWEIGHT FELINES

1/72

The Tigers

By: Armystar

Item no: ACD72019

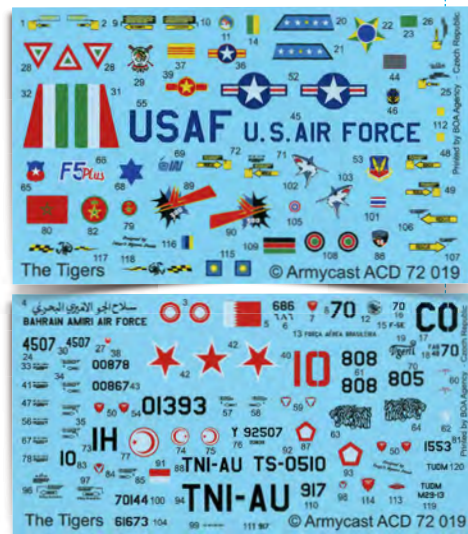
Price: €12.50

Web: www.armystar.cz

Armystar's second F-5 Tiger collection focuses on the second-generation single-seat F-5E variant, providing markings for 15 airframes from 14 nationalities. There's a huge variety of camouflage/liveries, from natural metal to overall single tone and various disruptive pattern schemes. This splendid four sheet offering features excellent colour density and demarcation - it's also available in 1/48, with an additional four choices.

The 15 airframes include:

- 85-01594/686, 6th Tactical Sqn, Bahrain Amiri AF, Shaikh Isa, 1986
- 4870, 1º/14º, Brazilian AF, Canoas, 1994
- 81-00638/4507, Escuadrón Aéreo 401, Santa Lucia, Mexican AF, 2007
- 73-00878, South Vietnamese AF, 1975



- 73-00867/Red 10, Soviet AF Test and Research Institute (GKNII VVS), Akhtubinsk, late 1970s
- 72-01393/01393, 405th Tac Trg Wg, Nellis, 1980
- 75-00450/J-808, Grupo de Aviación No.7, Cerro Moreno, Chilean AF, 1990
- 75-00447/805, Chilean AF
- 82-00638, 15 Ftr Sqn, Tunisian AF, Bizerte-Sidi Ahmed, 1990s
- 74-01553, 2Sqn, Meknes, Royal Moroccan AF, 1991
- 78-00827/TS-0510, Skadron Udara 14, Indonesian AF, Iswahyudi-Madiun, 1986

NOT SO DANISH CARRIER

1/144



Dan-Air London Comet 4B and 4C

By: 26Decals

Item no: STS44306

Price: £9

Web: www.26decals.com

British airline Dan-Air London is the subject of 26's two decal sheet, with carrier specific markings separate from generic airframe glazing and stencilling. This set is designed for Airfix's classic Comet 4B kit, but it's

possible it may also work with FRSIN, Welsh Models and AModel offerings, due to the passenger windows being supplied in sections. Serials are supplied for 17 of the airline's eventual 49 Comets and all are clad in the standard light grey/white

livery, with a red tail and cheat line along the fuselage. Differences between the 4B and 4C sub-types are captured faithfully, and there are decals for the upper and lower engine nacelle grilles, plus small walkway areas on the inner wing. Modellers will need to study the instructions carefully as several markings must be applied in a specific order, such as the passenger doors, otherwise detail will be lost.

TRACKED STINGERS

1/35

CVR(T) Scorpion and Scorpion 90

By: Star Decals

Item no: 35-C1201 Price: US\$6.50

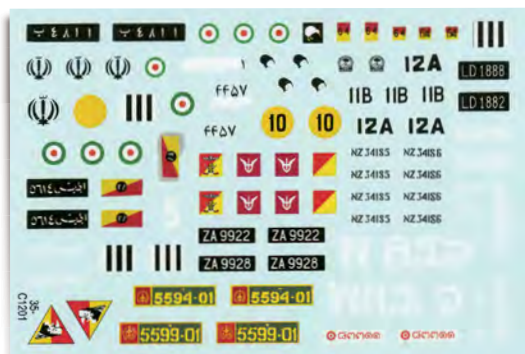
Web: www.star-decals.net

The first batch of CVR(T) Scorpions from Star Decals portrays vehicles from New Zealand, Iran, Iraq, Thailand, Malaysia, Indonesia and the Philippines, covering 11 subjects in total. This is a splendid selection, mainly addressing machines exported to the Middle East and Asia, and will certainly make for an eye-catching model when paired with an Accurate Armour or AFV Club kit. Register and colour boundaries are excellent, although the carrier film is matt.

The choices are:

- 5594-01, Batalyon Kavaleri 1, Indonesia
- 5599-01, Batalyon Kavaleri 1, Indonesia

- NZ34185/12A/10, Queen Alexandra's Sqn, Royal New Zealand Armcd Corps, 1983
- NZ34186/11B/10, Queen Alexandra's Sqn, Royal New Zealand Armcd Corps, 1983
- A1010651 Isarog, Philippines Army
- 83311, Royal Thai Army
- B4811, 247th Cav Bn, 4th Z Armcd Bde, 21st Inf Div, Islamic Republic of Iran Army
- 4457, 247th Cav Bn, 4th Z Armcd Bde, 21st Inf Div, Islamic Republic of Iran Army
- 5614, Iraqi Army



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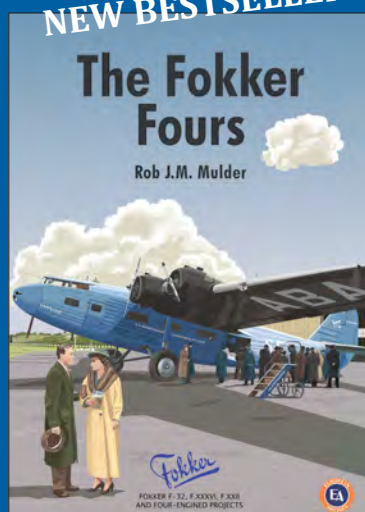
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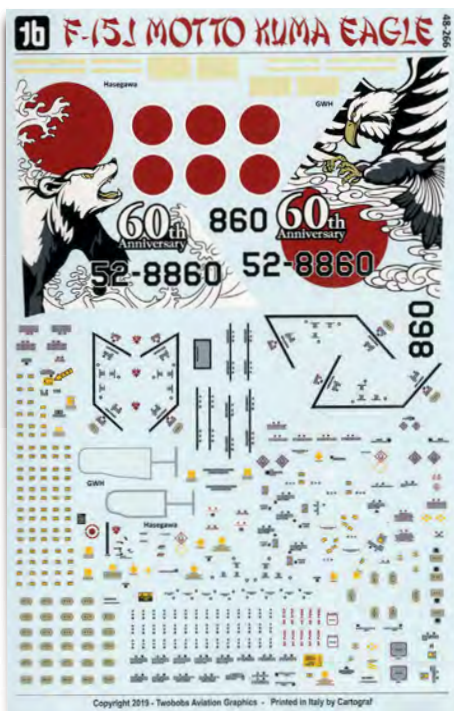
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EAGLE AND BEAR

1/48



F-15J Motto Kuma Eagle

By: Two Bobs

Item no: 48-266 Price: £14.99

Web: www.twobobs.net

Modellers looking for a stand-out scheme for their Hasegawa or Great

Wall Hobby 1/48 F-15 Eagles will enjoy this Two Bobs release. It depicts a one-off livery applied to an F-15J of the Japanese Air Self-Defense Force (JASDF) to commemorate the 60th anniversary of Chitose Air Base. It includes full airframe stencilling, insignia and serials, but the standout items are the markings for the distinctive twin tails - each is supplied as a single piece, with an eagle on the port tail and a bear (the squadron's chosen mascot) on the starboard side. All items are printed on gloss carrier film, with perfect register, colour density and sharp demarcation between tones, while

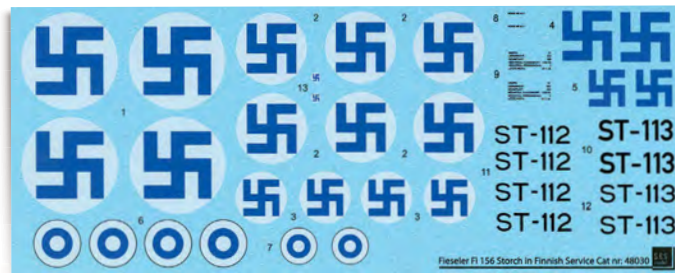
a replacement colour call-out is included in the set to aid total matching on the airframe.

The aircraft depicted is:

- 52-8860, 201 Sqn, No.2 Wing, JASDF, Chitose, Hokkaido, Japan, May 2017

SCANDINAVIAN STORKS

1/72



Fieseler Fi 156 Storch in Finnish Service

By: SBS Model

Item no: D72030 Price: £7.99

Web: www.sbsmodel.com

These markings from SBS Model should be suitable for any 1/72 offering of the Fieseler Storch (Stork) liaison aircraft, allowing modellers to depict the type in Finnish colours. The markings appear simple, with insignia consisting of swastikas for World War Two machines, and later Finnish Air Force roundels for the sole post-war example. Airframe serials are also included, with

a technical information panel provided for one scheme. White areas on the markings do appear translucent, so would benefit from an undercoat to prevent any camouflage being visible through them. The instructions also include colour guidance, with Luftwaffe colours employed alongside general aircraft hues. Four schemes are supplied:

- ST-113, Air Force HQ, Helsinki Malmi, Finland, August 1940
- ST-112, Air Force HQ, Helsinki Malmi, Finland, March 1942
- ST-112, Air Force HQ, Helsinki Malmi, Finland, June 1950
- ST-113, LeLv 14, Tiiskjärvi, Russia, December 1942

SCHWALBE AND TURBINA

1/48

Me 262 B-1a/B-1a U1 and Avia CS-92

By: Xtradecal

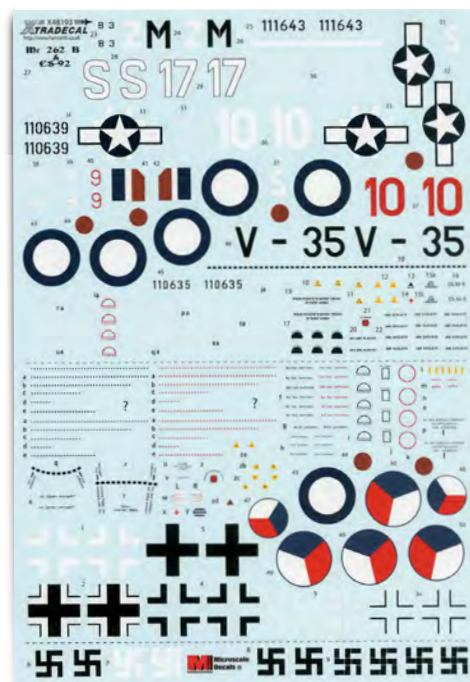
Item no: X48193 Price: £7.99

Web: www.hannants.co.uk

Xtradecal has released markings for 1/48 two-seater Me 262s, including trainer, night-fighter and Czech-built Avia CS-92 'Turbina' airframes, plus several captured aircraft. The sheet contains two colour options for stencilling, plus Balkenkreuz alongside Czech, RAF and American insignia - all with placement/colour guides and references. A 1/32 scale set (X32068) is also available, but this omits three airframes (including the Avia example) and doesn't include stencils. The eight schemes are:

- B-1a, Wk Nr 110639/White 35, Vera, USAAF, Lechfeld, Germany, May 1945
- CS-92.3, V-35, September 1947
- B-1a/U1, Wk Nr 110635/Red 10, IV./NJG 11, RAF, Schleswig, Germany
- B-1a/U1, Wk Nr 110306/Red 9, IV./NJG 11, RAF, Schleswig, Germany

- B-1a, Wk Nr 110639/White 35, Vera, USAAF, Lechfeld, Germany, May 1945
- CS-92.3, V-35, September 1947
- B-1a/U1, Wk Nr 110635/Red 10, IV./NJG 11, RAF, Schleswig, Germany
- B-1a/U1, Wk Nr 110306/Red 9, IV./NJG 11, RAF, Schleswig, Germany



PACIFIC MEDIUMS

1/35

PTO Sherman Tanks Vol.1

By: ToRo Model

Item no: 35D54

Price: €7

Web: www.toro-model.com.pl

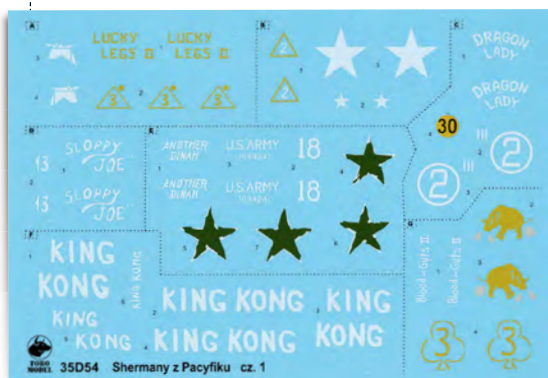
This is the first of ToRo's 1/35 markings for Sherman tanks deployed to the Pacific theatre of operations, comprising seven schemes and covering several M4 variants. The decals are supplied on an overall glossy carrier film, with good colour register and opacity, particularly as most of the markings are

white. Placement is indicated in greyscale; but colour profiles with painting guidance are available on Toro Model's website.


The seven choices are:

- M4, *Lucky Legs II*, 754th Tk Bn, Bougainville, 1944
- M4, 710th Tk Bn, Palau Islands, October 1944
- M4, *Dragon Lady*, 754th Tk Bn, Luzon, Philippines, February 1945
- M4A1, *Sloppy Joe*, 603rd Armd Coy, 41st Infantry Div, Carolina Islands, 1944
- M4 Composite, 3099241

Another *Dinah*, 763rd Tk Bn, Okinawa, Japan, 1945
 † M4A2, *King Kong*, 4th Marine Tk Bn, Saipan, 1944
 † M4A2 Dozer, *Blood-Guts II*, 4th Marine Div, Guam, 1944

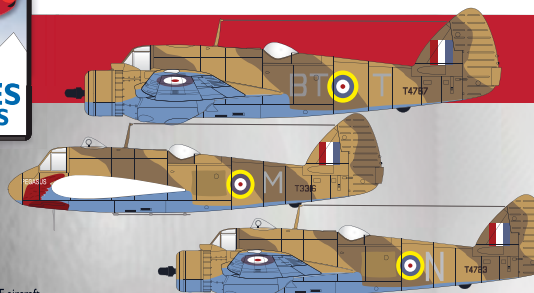


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SUNDERLAND SANCTUARY

1/700



Royal Navy Seaplane Dockside Base

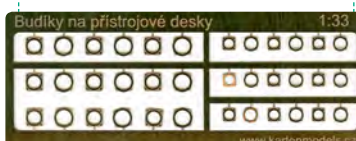
By: Flyhawk Item no: FH 1161
Price: £22 Web: flyhawkmodel.com

There seems to have been a recent improvement in styrene moulding techniques, and Flyhawk has been at the forefront, incorporating incredibly fine detail into its kits. The Royal Navy Seaplane Dockside is a perfect example, offering seven styrene runners plus separate quay and launching ramp, and a photo-etched brass fret. The latter provides alternative lattice supports for a water tower, Sunderland propellers and twin Vickers for the MGB motor launch,

plus a servicing platform and 37 figures. A suitable base/backdrop is provided on the box rear, and all ancillary equipment is included, such as a dockside building, AEC Matador refueller, Albion AM463 prime-mover and 2-ton crane – there are even barrels and crates. The highlight is the two splendid Short Sunderland flying boats, which can be built in waterline or onshore configuration. While the suggested scheme is for a Dark Green/Dark Earth/bare metal airframe, later roundel styles are included for modellers preferring Ocean Grey/Dark Green/White machines. This excellent set will work as a standalone build or as the basis of a larger diorama.

DIAL SURROUNDS

1/33



Frames for Dashboards

By: Karton Models
Item no: KMS-017
Price: €3
Web: www.yenmodels.be

While the scale might at first appear odd, it's intended as being suitable for both 1/35 and 1/32 vehicles and provides dial surrounds for any dashboard. There are six styles of frame, with three of each, and these are presented in two sizes on a single photo-etched brass fret. Notably, several have what appear to be bolts at each corner, which means they may also be suitable for 1/32 scale aircraft instrument panels.

SUPERCHARGED MERLIN

1/72

Spitfire Mk.IX Engine

By: Eduard Item no: 672126
Price: £14.25 Web: www.eduard.com

Eduard's Spitfire's are absolute gems, and its Brassin range enables modellers to pick and choose the detail level – this gorgeous resin and photo-etched (PE) brass Merlin 61 engine is for those wanting to go 'all out' on a build. There's a staggering amount of refinement incorporated into the finely cast resin components, with choices of round- and fishtail-type exhausts plus early and late cowling tops to complement the ten-piece engine. Clear guidance is provided as to where the kit fuselage and lower wing parts must be cut to allow the conversion to fit.



WHEELED STORAGE

1/48



Portable Toolbox

By: Plus Model
Item no: AL4075 Price: €13.90
Web: www.plusmodel.cz

Although the packaging lists this as just a Portable Toolbox, the Plus Model catalogue states it's a US Air Force example, and the stencilling matches the style used on ground servicing equipment with that organisation. It's a remarkably simple resin accessory, with a single-piece main drawer section (all closed), individual castor wheels and brackets, plus a towing eye, for a total of ten parts. A length of copper wire is also supplied for the axles, and there are a number decals for each drawer, completing this delightful package.

POST-WAR BOOTS

1/72



Lancaster Mainwheels

By: Barracudacast
Item no: BR72415 Price: US\$6.95
Web: www.barracudacals.com

Modellers wanting to build post-1945 Lancasters will have noted the lack of suitable mainwheels, as later machines had a block, rather than smooth tread. Step forward Barracuda with these superbly mastered and cast resin replacements, which are suitable for any 1/72 Lancaster kit – it's just a matter of drilling the hole for the axle to the required diameter. The detail is crisp, and far superior to that on styrene alternatives, notably the hubs and sidewalls. These are also available in 1/32 scale, for either Hong Kong Models' or Wingnut Wings' Lancasters.

EASY INSTRUMENTS

1/48

Fw 190A-8 Löök

By: Eduard
Item no: 644015 Price: £6.54
Web: www.eduard.com

Eduard's Löök series has been a boon for modellers, offering the ideal combination of highly defined detail with ease of assembly. Its Fw 190A-8 set comprises a two-piece resin pre-painted instrument panel, plus a similarly coloured photo-etched (PE) metal fret for a complete set of seatbelts. This is a major improvement on the kit parts, regardless of which version (Weekend, ProfiPACK or Overtrees) it's used on, and while the PE may require care when bending, attaching the panel is straightforward.



'WHAT-IF' INTERCEPTOR

1/72

Hawker Tandem Hunter All-Weather Fighter

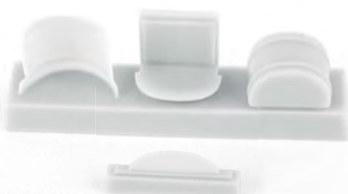
By: Freightdog
Item no: FDR72136 Price: £17
Web: www.freightdogmodels.co.uk

Freightdog has expanded on its 'paper' tandem-seat Hunter trainer (see Reviews, Oct 2019) with an interceptor variant. It's designed to fit Revell's 1/72 FGA.9 and comprises the same parts as the initial set (FDR72127), plus a new radar-equipped nose section and two rocket pods for the outboard pylons. This means there's a new forward fuselage, plus tandem cockpit tub, nosewheel and replacement mainwheels, plus two vac-form canopies. Modellers wanting a missile-armed fighter will need to source the Firestreaks separately, together with decals for period units.



FRENCH
FIGHTER JUICE

1/72



Dewoitine D-520 Fuselage Fuel Tank
By: CMK
Item no: 7415 Price: €7
Web: www.cmkkits.com

Hasegawa's 1/72 Dewoitine D-520 was first tooled more than 20 years ago, but CMK's release breathes new life into the kit by adding a resin fuel tank. It comprises four components on two casting blocks, which will require removal and parts to be tidied prior to fitting. Detail on the tank itself is restrained, with a filler locator and bands across its surface, however the replacement panel – replicating the fuselage section removed to access the container – has accurate features cast integrally on its inner and outer surfaces.

CAN THE CAN

1/35



Allies Jerry Cans Set WW2
By: MiniArt
Item no: 35587 Price: £15.99
Web: www.miniart-models.com

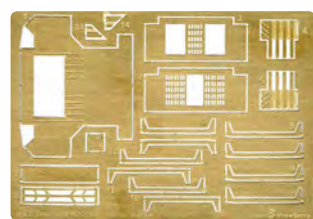
MiniArt has released another comprehensive set of accessories for adding incidental detail to models or dioramas, with this set providing World War Two Allied fuel containers. It comprises 15 grey styrene runners, plus a photo-etched brass fret and decal sheet. Components are moulded crisply, with no flash or seam lines, but ejector pin marks are visible through external surfaces (although they are not raised on these areas). There are five styles of storage vessel, with USA and British War Department (WD) labelling engraved on several parts, and extra markings provided as decals.

BLACK
ALERT

1/2500

USS *Discovery* NCC-1031
Hangar Bay
By: Greenstrawberry
Item no: 08419 Price: US\$23.92
Web: www.greenstrawberry.cz

Greenstrawberry specialises in photo-etched (PE) upgrades for sci-fi subjects, and this release is a hangar bay interior for Polar Light's Crossfield-class USS *Discovery*, arguably the lead 'character' in the Star Trek spin-off TV series. Many components will require bending prior to assembly, with the minute nature of the PE necessitating delicacy during this process, but the result is a neat representation of the structural ribbing and accurate angled side walls. There is also the option for a two-part shutter, although this will cover the detailed structure inside.

FAST BOMBER
GEAR

1/48

Ju 88 Wheels Late
By: Eduard Item no: 648134
Price: £4.86 Web: www.eduard.com

This splendid wheel set is intended for Dragon's 1/48 Ju 88. Supplied are a pair of mainwheel tyres with two-piece hubs, plus a tailwheel featuring separate PE mudguard components. Detail is to the firm's usual high standards, with tyre sidewalls featuring convincing raised manufacturer legends and engraved tread, while separate wheel hubs are accurate representations of the full-sized items and will ease painting. Clever engineering means assembly will disguise marks from the casting blocks, which aids preparation.

ROYAL NAVY
CHEERLEADERS

1/350



Two pdr Pom-Pom Mk.VIII gun on quad mount Mk.VII (x3)
By: Black Cat Models
Item no: AC350038 Price: €12.95
Web: www.blackcatmodels.eu

These minute 1/350 anti-aircraft batteries are 3D-printed items from French-manufacturer Black Cat Models, supplying three Mk.VIII 'Pom-Pom' guns on Mk.VII quad mounts, following the earlier eight-gun Mk.V emplacement release (see December 2019, Reviews). Each firing position is a two-piece assembly, with parts held to a printed block with small attachment points, making removal a simple process. Detail is intricate, with wonderfully fine handrails, weaponry controls and gun muzzles demonstrating the refinement that 3D printing can provide.

POLIKARPOV
PANEL

1/72



I-16 Late Type
By: Yahu Models
Item no: YMA7309 Price: £2.50
Web: www.yahumodels.siemiannowice.com

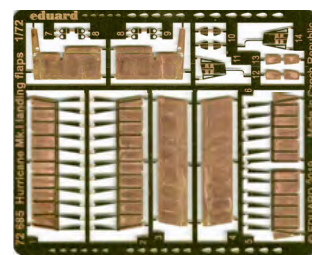
Part of its *JustStick* range, Yahu Models 1/72 I-16 pre-assembled instrument panel is designed as a drop-in replacement for ICM and Amodel offerings. The unit captures the look of the real item accurately, including the asymmetrical upper surface, while the displays themselves are recessed into the panel and are fully legible, with individual needles and numerals on each dial. The open cockpit of the type means that the interior is clearly visible, so this release will be a popular choice with modellers of Soviet aircraft.

PERMISSION
TO LAND

1/72

Hurricane Mk.I Landing Flaps
By: Eduard
Item no: 72685 Price: £7.54
Web: www.eduard.com

Arma Hobby's new-tool 1/72 Hurricanes are available in 'Junior' and 'Expert' configurations, with the latter containing photo-etched (PE) additions to the former's styrene, enhancing the cockpit and undercarriage bay (see Reviews, September 2019). Eduard has taken this a step further by producing PE landing flaps, although fitting them will require the wings to be modified, plus the modeller is required to provide their own plastic rod. The components are well-detailed, with surfaces constructed in layers and fine rivets being engraved or embossed as necessary.



SWEET SPECTRUM

Acrylic Gloss Candy Inks
By: Green Stuff World
Item no: N/A Price: €22.37
Web: www.greenstuffworld.com

Modellers are arguably spoilt for choice when it comes to camouflage tones, but some projects require the application of bolder hues. This Candy Inks set from Green Stuff World is ideal for these purposes. Eight water-based acrylics are supplied in 17ml bottles, with suitably emotive names describing the range of shades: 1726 Amber Orange, 1737 Jade Green, 1738 Amethyst Purple, 1739 Sapphire Blue, 1755 Tiger Eye Brown, 1756 Ruby Red, 1757 Quartz Magenta and 1759 Citrine Yellow.



LUFTWAFFE TAC-RECCE

1/48



Bf 109G-4/R3 Conversion
By: AIMS Item no: 48P018
Price: £12.60 Web: aimsmodels.co.uk

Reconnaissance variants of World War Two fighters are rare, so AIMS' Bf 109G-4/R3 conversion set is likely to be popular. It's designed for Eduard's 1/48 kit, and supplies a complete camera, film canister and fairing ensemble, long-range fuel tanks, new wing panels and cockpit controls. There is even a decal sheet with three markings options, two with a fuselage-mounted camera and one with a wing-mounted unit. All resin parts are cast beautifully, with recessed panel lines on the drop tanks, while the camera is a faithful Rb.50/30 replica.

SUPERSONIC SEATING

1/48



F-104 C2 Ejection Seat
By: Eduard Item no: 648286
Price: £9.89 Web: eduard.com

Eduard's 1/48 C-2 ejection seat is intended for Hasegawa's kit and comprises four resin components, a photo-etched (PE) metal fret and a decal sheet. There's a choice of two seat cushions, both with convincing renderings of the cloth material, while the seat back and ejection rails are replicated superbly. Harnesses and ejection firing handles are supplied pre-painted on the PE fret, although the former will require bending to fit accurately.

ARMoured UPGRADE

1/72

Leopard 2A4
By: Hauler
Item no: HLH72082 Price: €8.68
Web: www.hauler.cz

While Dragon's Leopard 2A4 is regarded as one of the better offerings in this scale, Hauler's photo-etched brass fret enhances the tank's exterior significantly. Whether it's the cupola vision block covers, engine grilles, laser-rangefinder/sighting unit facings and doors, driving mirrors, crew foot rails or vision-block lenses, all parts are replicated accurately. It's also surprising how little styrene must be removed before these additions can be fitted, highlighting just how much extra this delightful little set offers to armour modellers.

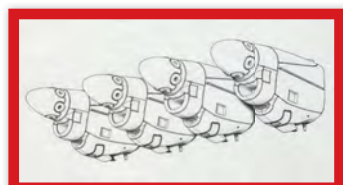


HERCULEAN POWERPLANTS

1/48

C-130J Engine Nacelles
By: Brengun
Item no: BRL48123 Price: €20.99
Web: www.brengun.cz

If Italeri's C-130 kits (regardless of scale) have a weakness, it's the engine nacelles, so Brengun's re-boxing of Attack Squadron's correction set is most welcome. The main structures are five-piece items, including auxiliary air flap and antennas, plus a separate (and accurately shaped) spinner. These are intended as direct replacements for the styrene components, although a short length must be removed on the wing parts for the inner nacelle. The casting is excellent and, as the engine cowling is hollow, these won't add too much weight to the model.



'TONKA' SNOUT

1/72

Panavia Tornado Radar Nose
By: BRA.Z Models
Item no: BZ7001 Price: €8
Web: www.brazmodels.com

For some reason, the Panavia Tornado's radome has proved challenging for kit manufacturers to replicate accurately, and this single-piece resin replacement is intended for the Revell offering. It captures the complex curves of the real item correctly and will add significantly to any build. No instructions are provided, so modellers will need to check the styrene to determine the best cut line, after which it's a simple matter of securing the new component with a cyanoacrylate or epoxy adhesive.



SHOW ME THE WAY

1/35



German Road Signs WW2 France 1944
By: MiniArt
Item no: 35600 Price: £11.99
Web: www.miniart-models.com

Diorama builders have much to savour with MiniArt's German Road Signs in France set, which comprises 75 components on three styrene runners. Curiously, the surfaces of the signs (supplied in three styles with several sizes for each) exhibit fine engraved grain representation, yet those for the poles are coarser and suffer from excessive flash - almost as if these came from a different company/earlier product. A large full-colour decal sheet provides suitable dual German/French signage, although several will require removal of the excessive carrier film.

STRAPPED IN

1/48

Rafale C Seatbelts Grey
By: Eduard
Item no: FE968 Price: £4.86
Web: www.eduard.com

Eduard's release is a photo-etched (PE) steel upgrade set for Revell's 1/48 Dassault Rafale; it's a small fret containing pre-painted harnesses and ejection handles, plus a white-textured seat back and lower cushion. Seatbelts and fine buckles are represented convincingly, while firing handles feature sharp colour contrasts between the yellow and black tones. The PE parts will need to be bent before they can be attached, plus moulded detail must be removed from the kit-supplied styrene to make way for the new items.

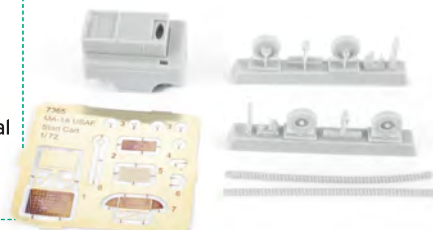


JET BLOWER

1/72

MA-1A USAF Start Cart
By: CMK
Item no: 7365 Price: €10.30
Web: www.cmkkits.com

MA-1A start carts were a familiar sight on US Air Force bases between the 1950s and 1970s, and CMK's resin and photo-etched representation is an accurate replica. There is a one-piece body, with wheels and fittings, plus a small photo-etched brass fret, which provides exterior panelling, tie-down eyes and a towing arm. The casting is excellent, with finely reproduced tread on the wheels, while the two-part air hose must be immersed in hot water before being shaped to suit. Decals and full stencilling are supplied for an overall yellow cart, although those seen in Vietnam and Korea were Olive Drab.





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The Lockheed P-80 (later F-80) Shooting Star was first delivered for operations with the United States Army Air Force's 412th Fighter Group in December 1945, and its 74th anniversary provided the inspiration for this month's archive selection.

Here, eight P-80B-1-LOs are lined up on the runway at Lockheed's testing facility in Van Nuys, California, led by 45-8496, which had the 'buzz number' PN-496 on the nose. This airframe displays subtle streaking on its front end, with an interesting patina across the

riveted bare metal finish (note the different tone of the gun blast panels), plus a small leak has led to a stain on the nosewheel cover stencilling. It appears the muzzles of the .50 calibre machine guns have been covered where they protrude from their ports. The P-80 was one of the first jets to be fitted with a boundary-layer control splitter plate in the intake, which helped to smooth the flow of air into the engine, and this is clearly visible. While the canopy has been left open, the cockpit's instrumentation and gunsight have been covered as a protective measure.



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AIRFIX MODEL WORLD **ISSUE 111**
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NEW
TOOL

GRUMMAN F6F-5 HELLCAT

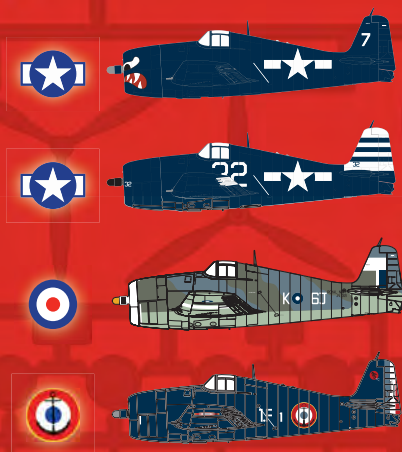
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Length 424mm Width 543mm Pieces 572

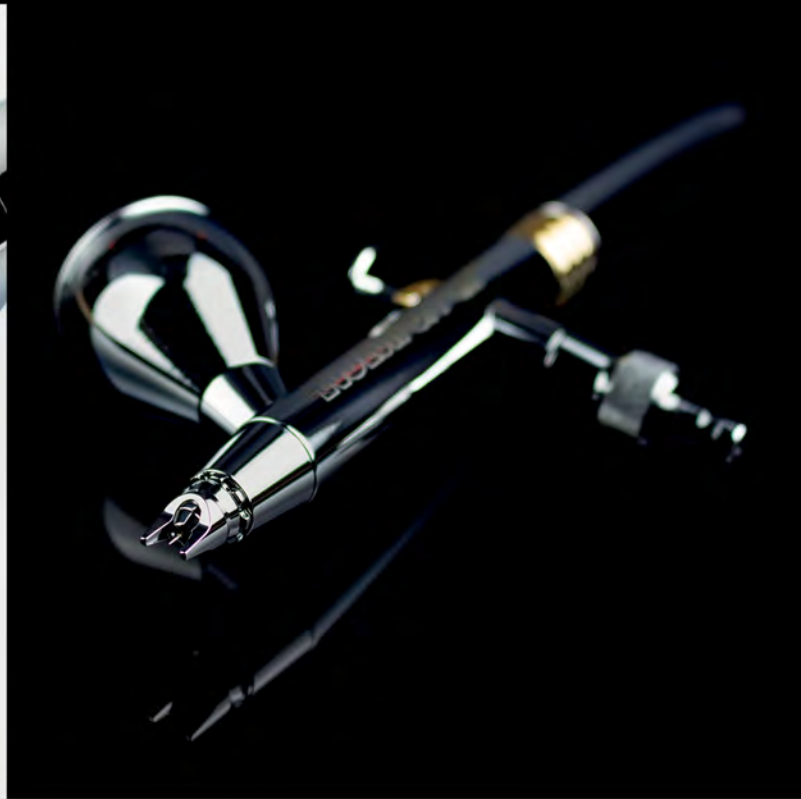
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