

HOT HATCH Belkits' 1/24 VW Polo R WRC





## JTENTS

## **REGULARS**

#### 06 News

The latest happenings in the world of plastic modelling.

#### 12 Show Scene

At-a-glance model show calendar.

#### 74 Beat the price increase

Subscribe to Airfix Model World and make great savings on cover price! See pages 74-75 for details.

#### 76 On the Shelf

Fifteen pages of reviews highlight the latest modelling and reference products from around the world.

### 98 The Plastic Surgery

Quiz AMW's team of contributors, history writers and industry contacts regarding your own modelling mysteries.













aircraft kit.





uilt in huge numbers, the Sabre was unquestionably one of the greatest aircraft of all time.

Facing a technologically equal enemy during the Korean War (in the MiG-15), the type achieved some of the greatest and most

symbolic victories in the history of air combat. As testimony to its excellent design, the Sabre formed the backbone of NATO's fighter force in Europe during the 1950s, broke world speed records and even fought the world's first airto-air missile engagements, when

Taiwanese Sabres launched against Chinese MiG-15s in the Battles of the Taiwan Strait, in 1958.

#### **Eduard treatment**

Inside the box were 87 light grey plastic parts, seven clear plastic components, one pre-coloured

photo-etched (PE) metal fret (and another in plain brass), paint masks, nine grey resin items and a decal sheet with markings for five aircraft.

The styrene parts were, of course, moulded by Hasegawa and were first issued in 1996, but the quality remains fresh and very little to no flash at all was present. The clear runner suffered from being 'short shot' but was deemed fixable (more on this later). As with all its limited-edition boxings, Eduard provided improvements to





▲ The ejection seat and rear bulkhead were provided in resin and photo-etched metal. This was painted in Tamiya XF-69 NATO Black with highlights in dark grey, while the head and arm rest received Humbrol 60 Scarlet.



▲ A pre-coloured PE instrument panel was provided, to be placed over the plastic part... highly effective.

the base kit, in this case, mainly addressing the cockpit area. Resin parts for the ejection seat were cast flawlessly, and besides two PE pieces, all the remaining metal was aimed at embellishing the cockpit and canopy areas.

Ultimate Sabre		
Ву:	Eduard	
Stock Code:	1163	
Scale:	1/48	
Price:	€67.45	
Available from		

Available from: Eduard www.eduard.com



The decal sheet offered five highly attractive colour schemes, exclusively for natural metal aircraft, and was printed perfectly by Cartograf.

The first step was to wash all the resin and plastic parts with soap and water, before rinsing and letting them dry.



This process eliminated mould release agent still present on the parts and contributed to good paint adhesion. Hasegawa's cockpit was reasonable via the plastic parts alone, but the resin and PE provided by Eduard

transformed it into a real focal point. To install these bonus items,



several details present on the plastic parts were removed as per Eduard's instructions. Vallejo 74.602 Black Primer then followed, as well as two layers of Tamiya XF-69 NATO Black. Highlights to this were achieved with Lifecolor UA 030 Dark Grey. Then, simple dry-brushing with different shades of grey was carried out on the side consoles.

The Sabre utilised an ejection seat also built by its manufacturer, North American Aviation; it was reproduced exquisitely by Eduard and demanded careful assembly before black primer was airbrushed to harmonise the different media. Tamiya XF-69 NATO Black was used on the entire seat. The highlighting process was the same as described previously, and preceded the painting of the arm and head cushions with Humbrol 60 Scarlet. After ample



Undercarriage legs and bays received extra detail, via scrap styrene, copper wire and small pieces of plastic tube.

▼ This intake was removed as it was not present on the airframes active during the Korean War. Plastic card was used to blank the orifice.





drying time, the pre-coloured ▲ The compressor and exhaust fans "RESIN PARTS FOR THE EJECTION SEAT received several layers of Vallejo Model Air 71.062 Aluminium and a dark oil wash, to enhance the contrast and depth of the plastic detail.





PE seatbelts were glued in place and satin varnish was airbrushed in preparation for a dark enamel wash, which helped to accentuate the depth the piece. This treatment was extended to the cockpit parts as well, before matt varnish muted any shine.

#### **Body closure**

Several sub-assemblies had to be constructed before the fuselage

halves were mated. The structure representing the intake trunk was built and the ejector pin marks dealt with. Also at this stage, the compressor fans and exhaust nozzle for the J47-GE-27 engine were painted in aluminium and treated to dark oil wash. When dry, these were subsequently enclosed both on the intake trunk and exhaust nozzle.

The wheel wells were also dealt

with at this primary stage, and the front bay had to be glued to the underside of the intake trunk. Moulded kit detail was enhanced with a mix of different material such as copper wire, wire insulation channel, and plastic scraps. Main undercarriage bays and legs were also detailed as described. Black primer followed suit, before Vallejo Model Air 71.010 Interior Green was sprayed as the base colour. Details

were picked out with Vallejo Model Color tones, and AMMO MIG's A.MIG 1618 Deep Brown Panel Line Wash created shadows.

An important accuracy point was the necessary removal of an intake structure for extra cooling of the engine, moulded on the starboard side of the fuselage just in front of the airbrake bay. Hasegawa probably added this detail as it is present on licence-

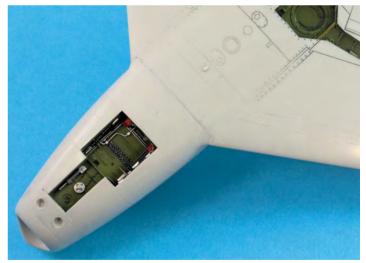




▲ The airbrake bays were painted Interior Green and the details picked out with Vallejo acrylics.



▲ The intake lip seam needed neatening and Mr. Dissolved putty made short work of the task.



Just a smear of putty was needed where the wing underside structure met the fuselage.



F-86F SABRE



built Mitsubishi machines, but it was not seen on US Sabres present in Korea. Therefore, the space was filled from the inside with plastic and sanded to shape, while the edge of the fuselage surrounding the exhaust nozzle was also thinned for a more trueto-scale appearance. Finally, as per the instructions, ballast in the form of fishing weights was glued on top of the intake trunk, which prevented the Sabre from becoming a tail-sitter.

With sub-assemblies readied and the fuselage halves prepped, these were brought together with Tamiya Extra Thin Cement, which worked very well with Hasegawa styrene. The air intake needed blending with the fuselage, though, so Mr. Dissolved putty was applied in several layers (with sanding in between) until a perfect transition was achieved.

#### Pressing forward

The mainplaines consisted of a full under-wing piece, completed by two upper wing halves. Fit and alignment was nearly perfect, just requiring a dab of filler on the wing root join and front edge.

brakes were sprayed with X-1 Gloss Black in preparation for the metallic colours to followed, courtesy

of Alclad's range of metallic lacquers. The front and main landing gear legs were sprayed with ALC-101 Aluminium, the doors received ALC-119 Airframe Aluminium and airbrakes ALC-115 Stainless Steel. When dry, these components were weathered with ink pin washes. The selected inks were ComArt's 21031 Blue Grey Smoke and 21041 Old Oil, applied with a fine brush and neatened when dry via cotton bud moistened with saliva.

The wheels were represented by styrene items and were of good quality; the tyres were painted with XF-85 Rubber Black and the provided masks duly applied before the rims were painted and weathered. Finally, the tyres were weathered with A.MIG 3011 Airfield Dust pigment, fixed in place with matt varnish.

The drop tanks were also built and detailed with Eduard PE

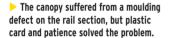


Overall view of the fuselage with the seam work done, re-scribed were necessary and ready to receive paint. The main undercarriage bays were masked with wet tissue paper and Maskol.





▲ The fuselage received a primer of Tamiya X-1 Gloss Black, which served as the prescribed undercoat for the Alclad metallic lacquers.









▲ The chosen base colour was Alclad ALC-101 Aluminium. Masking tape was used to section distinct panels, before the application of other various metallic shades from the same range.

items. When satisfied with the seam neatening, these were primed and received several thin coats of Mr. Paint MRP-3 Super Silver Metallic. This is similar to Alclad2, so the same protective features must be observed, namely good ventilation and a respirator mask. A small moulding hiccup was evident on the canopy though; it seems it suffered from being short-shot, which crippled the starboard frame. Nevertheless, it was salvaged with plastic card, Micro-Mesh pads and patience. When satisfied with the remedial work, it was dipped in Johnson's Future floor treatment and, after allowing several days for curing, the same painting process used on the drop tanks was employed.

#### Prepping the surface

The windshield was masked with items supplied in the kit (which fitted perfectly) and was subsequently attached with PVA glue, fairing the join with a watermoistened Q-tip. Behind the cockpit, and rails for the canopy, were then detailed with Eduard's PE and an assortment of scrap plastic...this effectively addressed one of the kit's shortcomings. NATO Black was then airbrushed, followed by several highlights in German Grey. The paint was then sealed with gloss varnish, in preparation for a dark wash mixed from Lamp Black and Burnt Umber oil colours. With the cockpit and adjacent area masked, the entire airframe was polished with sanding pads up to 12,000-grade and





model surface was ready for the main paint. To depict a Korean War airframe, a natural metal finish was clearly the order of

> cured completely, several Alclad2 metallic shades were airbrushed. The base layer comprised ALC-101 Aluminium, applied at 12psi (0.8 bar). When dry, selected panels were masked, and accentuated with ALC-102 Duraluminium, ALC-105 Polished Aluminium, ALC-106 White Aluminium and ALC-115

the day. With

the black base

All this work was guided through the study of several reference

Stainless Steel.

must be put on the safety measures used when applying lacquers; again, a decent filter mask and proper ventilation are vital.

#### Incorporating detail

The chosen colour scheme for this build represented tail number 24539, an F-86F-30 belonging to the 336ths FIS 'Rocketeers', based at Kimpo Air Base (K-14), circa 1954. The aircraft bore two names - on the port side was 'Dreaded Gomboo', a name chosen by pilot Lt Ken Ewing. To starboard the name was 'Sweet Rose', the moniker of crew chief Walter Yocum's fiancée, whom he eventually married.

This airframe bore two colour accents of importance. The nose section surrounding the air intake was blue, which was depicted with Tamiya's X-4. Note that in the instructions, the fairing protecting the radar is quoted as light

▲ The model's surface gained interest as several panels contrasted with others in different metallic shades.







grey, but after careful study of reference photos, it was deemed it should be painted dark grey, in this case Vallejo Model Air 71.056 Black Grey. The dielectric panel on the vertical tail was then masked and painted with 71.051 Barley Grey from the same range.

Main painting was rounded off with two layers of X-22 Clear to seal and protect the paint from subsequent decaling and

this modeller chose to apply clear varnish over the Alclad metallic shades, as the desired final finish was not overly shiny.

#### Colour and grime

As mentioned before, the decal sheet offered options for five airframes, all in natural metal. The decals displayed perfect register and colour saturation, and

weathering. Although debatable,

performed flawlessly with Micro Set and Sol solutions. The only touch-up needed was on the yellow portion of the tail identification band, which received attention with a small brush and Vallejo 70.953 Flat Yellow.

After studying reference photos, the decision was made to implement just very light weathering. Korean Sabres did get dirty, but as far as 'Sweet Rose\

Dreaded Gomboo' was concerned, the airframe was kept relatively clean, therefore, just a panel line wash was employed. AMMO MIG's 7423 Metallic Airplanes & Jets Weathering Set was used to good effect with the help of a fine brush. The patina created by the enamel paints acted as a medium to stain several panels, or even to create subtle depth impressions on the fuselage. Several panels were picked out individually, and the effect was reinforced through several applications of enamel washes. To round off the weathering, several dark grey and dark brown inks were airbrushed on the wing surfaces and fuselage. This managed to enhance several structural details and create extra interest. The inks used were ComArt's 21041 Old Oil and 21031 Blue Grey Smoke. Final assembly comprised the

installation



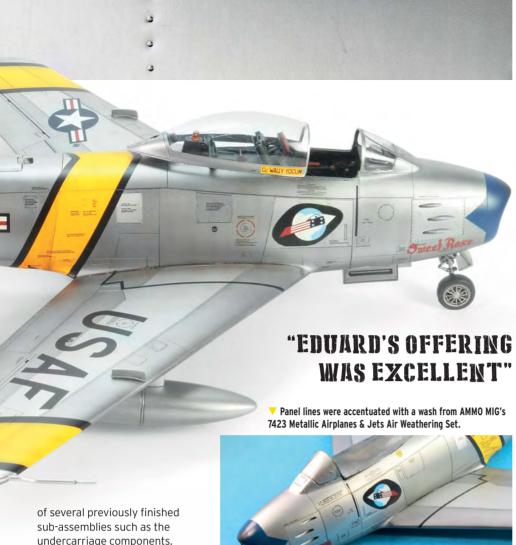
U.S.AIR FORC

24539

### REFERENCE

- Walkaround 21 F-86 Sabre, by Larry Davis (Squadron/Signal) ISBN: 978-0-89747-409-2
- Haynes Owners' Workshop Manual North American F-86 Sabre, by Mark Linney (Haynes), ISBN: 978-0-85733-094-9
- MiG Alley, by Larry Davis (Squadron/Signal), ISBN: 978-0-89747-081-0
- Website: sweetrose.yocumusa.com





of several previously finished sub-assemblies such as the undercarriage components, respective doors, canopy, airbrakes and probes. Where possible, this task was accomplished with PVA glue, as this was a non-aggressive medium for the paint finish. The exception was the landing gear legs, which had their mounting structures masked with Maskol, which enabled the use of Tamiya Extra Thin Cement, and the fuel jettison tube, previously painted scarlet and attached with Superglue.

#### The ultimate Sabre?

As far as this modeller is concerned, Eduard's offering was excellent. The recipe the company has followed for several years remains sound...load an attractive box with quality plastic and add PE and resin to address possible pitfalls or missing detail, and top it off with great colour schemes delivered on a high-quality decal sheet. With

this product, Eduard delivered just that, which enabled trouble-free construction, an enhanced cockpit and gorgeous colour scheme. The end result was a journey filled with modelling pleasure and the depiction of a real history-maker.



▲ When cleaning away excess wash, a patina was allowed to create interest on the surface of the wings and fuselage sides.



▲ ComArt Old Oil and Blue Grey Smoke were airbrushed on the aileron and flap joints, as well as other relevant panel lines. This task was performed with the help of a Post-it note for masking.





# ACE-MAKING

The group headquarters was at Johnson AFB, but the 336th sent a small detachment to Kimpo AB under the guidance of Lieutenant Colonel John C Meyer, and it flew its first mission on December 13.

#### Bogies in sight

The first actual MiG versus F-86 engagement took place on December 17, with 336th commanding officer Lt Col Bruce Hinton being credited for one enemy aircraft. By the end of December, the 4th Group had flown 234 sorties while engaging 76 MiGs, and the final total showed the F-86s had confirmed six MiGs destroyed plus two probables, against just one F-86 lost; a sobering reminder of what was in store for the MiGs until the war ended. By late February 1951, the rush by Chinese ground troops

## Warren Thompson recounts the Korean War successes of the legendary F-86

was the first massproduced jet fighter in the USAF inventory; its first flight was on October 1, 1947 and it became operational in 1949. When production ended, North American had produced a total of 9,860 units (all models combined. It held its own in the Korean War and populated four fighter/fighterbomber wings to do the job; 4th Wing, 51st Wing, 18th FBW and 8th FBW. It was also used as a photoreconnaissance asset in Korea, but it was the 4th Wing that had the

orth American's F-86

honour of being the first to take it into combat in December 1950.

On November 8th, 1950, General Hoyt Vandenberg offered to send the 4th Fighter Wing to Korea. The unit's component squadrons were the 334th stationed at New Castle AFB, 335th at Andrews AFB and the 336th at Dover. The pilots of the 4th were some of the most experienced in operating the Sabre. Their aircraft were loaded on the deck of the USS Cape Esperance and on November 29 it pulled out of San Diego for the two-week trip to Yokosuka, Japan.



Seen at Kimpo AB, shark-mouthed 'Peg "O" My Heart' was a member of the 336th Squadron. Note the Rocketeer emblem painted on the side, along with 'Tiger' above the teeth. (Jeff Dibrell via Thompson)

F-86 SABRE IN KOREA



▶ Here's what the F-86E instrument panel ooked like at the time...state of the art back then. (Walt Copeland via Thompson)

forced the F-86s to operate from Japanese bases. But by the end of April, the 334th and 336th Squadrons were able to commence operations from Suwon AB in South Korea.

On May 20, 1951, 50 MiG-15s crossed over the Yalu looking for a fight. There were a few scattered Sabre flights aloft locally and they all converged on that area. Among the F-86 pilots was Captain James Jabara, who had already claimed four MiGs and was close to being the first jet ace of all time. He arrived at the action with one external tank hung up, but that didn't keep him from entering the fray. He shot down two of the competition, which gave him six kills to become the first jet ace. In an interview with the press, he stated: "The MiGs

have a much higher rate of climb than we do but the dive speed and manoeuvrability is about the same. I've never been out-turned by a MiG. But, the MiGs outnumber us by about four-to-one."

On several occasions, a few of the MiGs had their tail units disintegrate or wings sheer off as they took evasive action. Conversely, when some of the F-86s received one or two hits from the MiG's 23mm shells, these caused horrific damage to the Sabre but most made it back to base. If one shell should hit a vital area, the result would most probably have been a crash. Keep in mind, for more than 18 months since the first encounter, Russian or Warsaw Pact pilots were flying the MiGs and different colour schemes, such as East

German and Czechoslovakian markings, were a giveaway. Still, the supreme training of the Sabre pilots meant they could hold their own in any dogfight.

#### A useful upgrade

In late July 1951, it was time to ship the older 'A' models out of Korea. and this duly ushered in the F-86E. The move was due mainly to the Russians and their allies improving their tactics; their timing was



Major James P Hagerstrom's F-86F 'MiG Poison' at K-55 in between missions. Hagerstrom was the only ace from the 18th FBW and was also the commander of the 67th Squadron. (Bob Cassatt via Thompson)



An early group of F-86As from the 334th Squadron, parked at Suwon AB in April 1951. (Al Beaty via Thompson)





One of the 80th FBS's F-86Fs, flown by Lt Al Shorrt, peels off to the right over South Korea, just after the ceasefire was signed. The 80th was involved in hitting ground targets as the Chinese conducted their last major offensive.

his experiences while flying with the 25th Squadron: "I usually had either Capt Ivan Kincheloe (10th jet ace) or Col Gabreski (8th jet ace) flying on my wing. We spotted three flights of MiGs about 5,000ft below us. We were not pulling any contrails, so they hadn't spotted us yet. Kinch bagged one as we dove into the middle of their formation. I came so close to another MiG that I looked him straight in the face and I remember he had a cloth helmet on. It was my turn to go after a MiG with Kinch covering me. The MiG was headed north to try and get across the Yalu. I gave him a three-second burst and he began to burn. Kinch yelled for me to break left. A second later, the MiG

so great that many times they could avoid the Sabres, which put them down around Pyongyang. To counter this, a second F-86 wing was needed, but it didn't arrive until late 1951, at which time Gen Vandenberg ordered the release of 75 F-86Es to form the second Sabre wing. The two squadrons flying F-80s (16th and 25th) would convert to the F-86E. Col Francis S Gabreski, the famous ace from World War Two, would assume command of the 51st Wing. 1st Lt Joe Cannon recalls one of



△ 'Honest John' was the personal F-86E flown by the 4th Group's leader, Colonel Walker M 'Bud' Mahurin, a former ace with the famed 56th FG 'Wolfpack' in World War Two. (Bill Thomas via Thompson)

shot my oxygen mask right off my face, blew the canopy away and my left wing was half the size of my right one. I punched out over the coast and the MiG set up a gunnery pattern on me coming down in the chute. Some of them came so close to me that they were swinging me horizontal in the chute. Fortunately, I was picked up by a Navy ship and was returned to K-13."

For most of June 1952, MiG encounters were much fewer so



the new F-86F Sabre. This would allow both wings to keep flying the bombing missions, but this time they would be able to defend themselves properly against the MiG-15 opposition. It was late December 1952, when

the 18th Wing moved into a 'super base' at Osan (K-55), Korea, with its new Sabres.

The debut combat mission for the 18th was a fighter sweep flown on February 25; this unit's commanding officer had already scored two kills and when he started flying the F-86F, he picked up three more, which placed him as the 28th jet ace of the war. In the meantime, the 8th FBW

The blue nose marking of the F-86 was brought into the 4th Wing in April 1953, and lasted all through 1954, even after it had repaired to bases in Japan. This F-86 was named 'Hurricane Carol', belonging to the 336th FS. (CF Harrington via Thompson)

the count for that month was just 20 shot down at a cost of four F-86 Sabres.

The 4th Wing was strengthened, mid-1952, when it got rid of its F-86As in favour of new F-86Es. Some of the 'A' models were sent to Japan and converted into RF-86As. Furthermore, in July 1952, the 51st Wing took on a new

look when all of its aircraft had the black and silver checkerboard marking painted on their tails.

The newest squadron assigned to the 51st was the 39th, which had flown F-51 Mustangs with the 18th Wing. As 1953 approached, a black cloud for the enemy loomed, as the 8th and 18th FBWs would give up their current fighters for

F-86 KOREAN WAR MIG-15 KILLS					
4th Fighter Wing	Air-to air	Air-to-ground	Total		
334th Squadron	142.5	0	142.5		
335th Squadron	218.5	0	218.5		
336th Squadron	116.5	4	120.5		
			Total 481.5		

51st Fighter Wing	Air-to-air	Air-to-ground	Total
16th FIS*	85	0	85
25th FIS	110.5	7	117.5
39th FIS	101	0	101
			Total 303.5



started transitioning to the F-86F on February 22, 1953 and on April 7 it flew its first fighter sweep along the Yalu River. By this time, the quality of MiG pilots had dropped and many ejected when the first shots were fired. Russia and its satellite countries had also recalled their pilots, so it was mostly Chinese and North Korean flyers left to make a stand.

By this stage, and after much preparation, the USAF was ready for one of the biggest experiments of the war. On January 1, 1953,



This F-86 was the personal mount of Col Harrison Thyng, who commanded the 4th Fighter Wing; he poses above his five kill markings - 5th kill on May 22, 1952 - making



seven F-86Fs were sent to Japan to begin Operation Gun-Val, whereby the Sabres were fitted with 20mm cannon in place of the .50 cal guns. All seven went to Kimpo and attached to the 335th Squadron. Just a handful of the

pilots were allowed to fly them and among these was Lt Col George L Jones, who would make ace while flying the Gun-Val Sabres (he would secure 6.5 kills, with the last two being in the cannon-equipped Sabre, to become the 30th jet ace

him the 16th jet ace of the war. (Harrison Thyng via Thompson)

of the war.

On May 18, one of the most unusual dogfights of the war took place. Six F-86s from the 39th Squadron encountered several MiGs in what should have been a routine flight. As the mêlée ensued. Lt James L Thompson noticed one of the MiGs had a huge Dragon painted down the length of its fuselage. Every time a Sabre would attempt to engage the 'Dragon MiG' several others would swarm in to defend it. Lt Thompson waited until all the MiGs were occupied before making his move. After several tight turns and violent manoeuvres, he got

in one long burst into the MiG's engine. The enemy pilot was seen to eject, giving Thompson his first confirmed kill of the war. This incident was recorded in the Star and Stripes News and ensured sensational attention around K-13. It was speculated by USAF officials that a high-ranking Communist general had been flying the MiG. After the mission, one of the groundcrewmen, Airman 2nd Class James W Manley, promptly painted a dragon down the port side of 'his' Sabre. It became one of the most colourful fighters in Korea and Thompson would go on to get one more MiG before the war ended.

