

INFO EDUARD

VOL. 12 • ISSUE 3 • MARCH 2012

NUREMBERG 2012:

MiG-21 1/48
& HELLCAT 1/72
AWARDS



BUILT

MiG-21BIS 1/48
La-7 1/48



HISTORY

SU-27, PART 2

PE-SETS

F-14D 1/32
IL-2M 1/32
BTR-40 APC 1/35

INFO EDUARD

VOL. 12 • ISSUE 3 • MARCH 2012

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Editorial and Graphics - Marketing department, Eduard-Model Accessories, Ltd.

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ON APPROACH

April 2012



eduard

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EDITORIAL



Well, the Nuremberg Toy Fair is done, and provided some positive feedback for us, as is generally the case. However, I feel an interesting difference this year compared with the previous ones. For example, over the last year, everybody was surprised by the quality of our MiG-21. But this year, our Bf 109E, itself quite well executed, if I may say so myself, was taken as a matter of fact. No surprise. I think this is the best that we can get, and it's what we want.

The plastic kits are always the most discussed part of our products, illustrated by what was the centerpiece of our exposition, our new Bf 109E. But it certainly was not alone; our booth had another hero. It was the photo-etched vegetable and various animal sets, with especially the butterflies attracting a lot of attention. Many people who were just curiously walking around, with no specific knowledge of our

modeling business, stopped in to see these colored etches, where the bugs and butterflies were the most admired. Maybe this has a future in scale plastic modeling, who knows? And in such a context, maybe it's time for photo-etched flies splattered on the leading edge of an aircraft wing, and why not on the windscreen? And in three scales? It has to be realistic, and perhaps a decal would be even better! I don't know about you, but the flies on my car windshield and on all of the leading edges makes it seem like a great reference manual for such weathering! But, for now, the next batch of our photo-etch vegetables will come in April.

Now, all this doesn't mean that the kits aren't being discussed. They are for sure, and the new Emil offers up a great topic for finding errors, as usual on new releases. It is always fascinating to me, how many problems could be found on such a small thing like a plastic kit! And also, how quickly dimensional inaccuracies and other failures are identified! Don't worry, I will not get

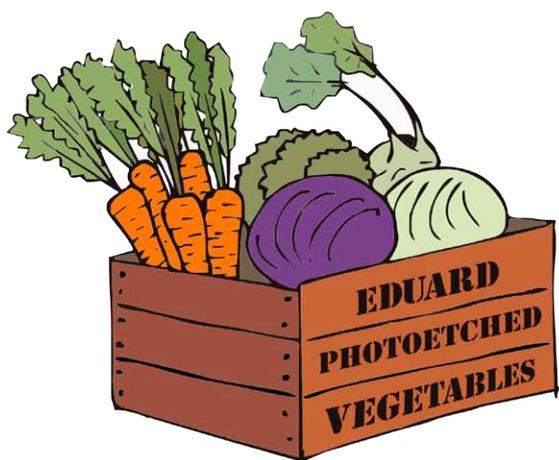
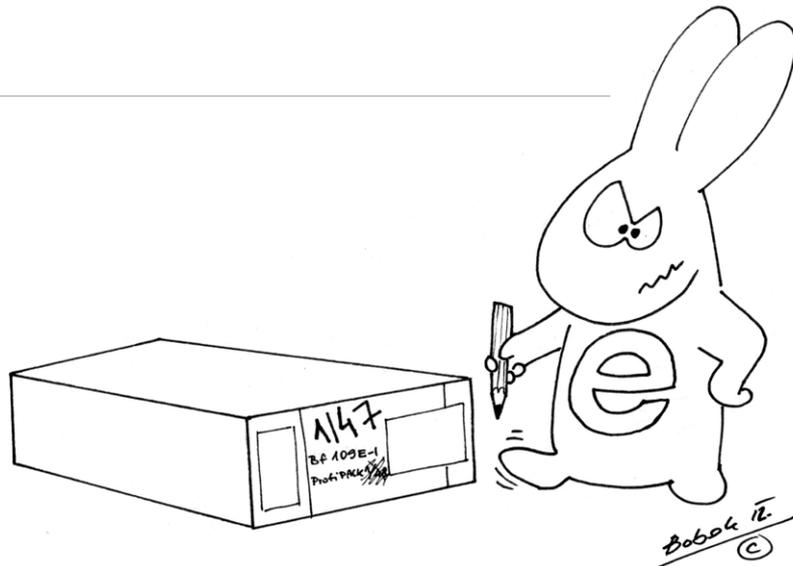
into a wrangle over the accuracy of our kits. There is no absolutely dimensionally perfect kit, and it is squarely up to you, if our kits are acceptable to you or not. I can only promise, that we will create all of our kits to the best of our ability.

Although the dimensions are naturally important, I must confess, that the most important point for us remains fit and details; external details as well as internal ones. Our new Emil represents our topical top. We can't do it any better right now. If you want something better, wait for our next release. Wait till the summer, for the Bf 110E in 1/72.

We opened a PayPal payment gate in February with great acceptance, when most payments made during February were made through PayPal. It surprised me, but thank you!

Keep on modeling!

Vladimir SULC

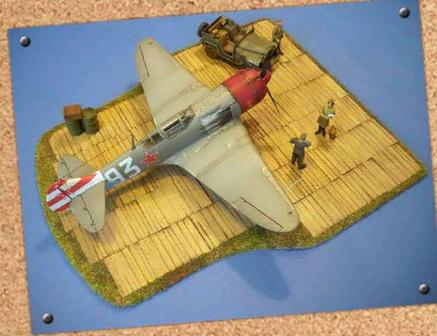


INFO MARCH

CONTENTS:
 - KITS: Fw 190A-7
 - BIG ED D-51D!
 - slow konstruktions
 neu!
 - built Lo-7

photo-etched files
 splattered on the leading
 edge of an aircraft wing :-)
 and why not
 on the windscreen?
 And in three scales!

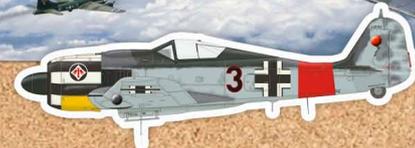
HELLCAT
 BF 109E
 MiG-21
 P-61A PE



MUREMBERG 2012
 PICTURES,
 AWARDS AND KITS...
 ↑
 ε & J
 😊



PROFESSOR
 PANTER
 17.3.2012
 PLATH



Fw 190A-7
 - ProfiPACK
 - 4 canu
 MiG-21BIS
 - weekend
 + PE-SETS
 + brassin



GREETING
 FROM AUSTRIA
 (P)



(APRIL & MAY)

PALMS: WASHINGTONIA
 FIUFERA, COCOS NUCIFERA



Fw 190A-7 ProfiPACK

1/48 Cat.No. 8172



W.Nr. 430352, 2. /JG 1, Dortmund Airfield, Germany, January, 1944



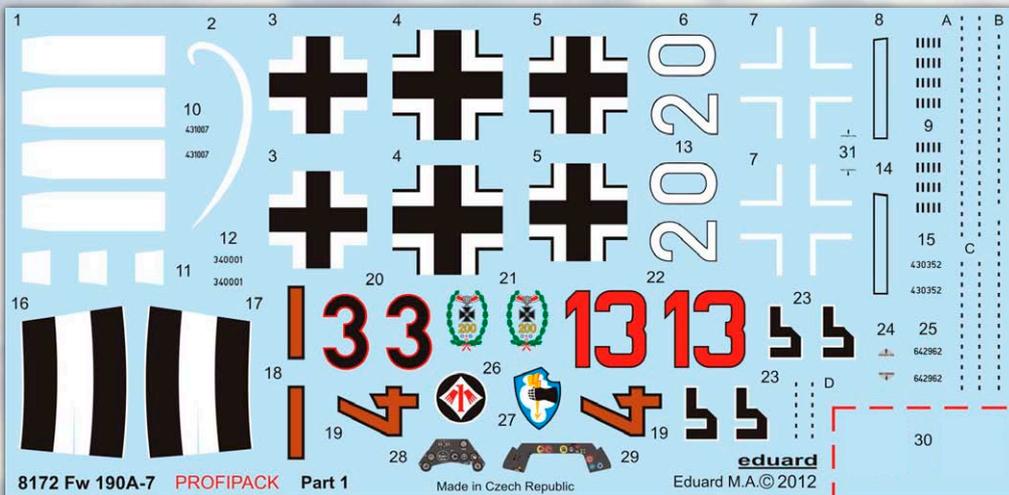
W.Nr. 340001, flown by Oblt. Waldemar Radener, CO of 7./JG 26, Cambrai-Süd Air Base, France, May, 1944



W.Nr. 642962, flown by Maj. Hans-Günther von Kornatzki, CO of Sturmstaffel 1, Salzwedel Air Base, Germany, February, 1944



W.Nr. 431007, flown by Heinz Bär, CO of II./JG 1, Störmede Air Base, Germany, April, 1944



Kit in the ProfiPACK edition covers a missing link in the Eduard Fw 190A family. Correct panel lines for that version, supported by various kit accessories offers an accurate reproduction of the A-7 variant. The decal sheet in advanced quality is printed by Eduard and offers four very interesting camo schemes from 1943 to early 1944. With the included photo-etched accessories you can build also the armored version A-7/R2.

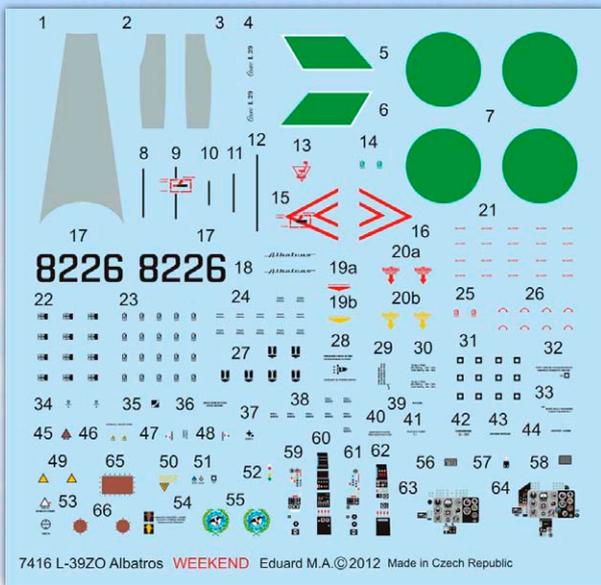
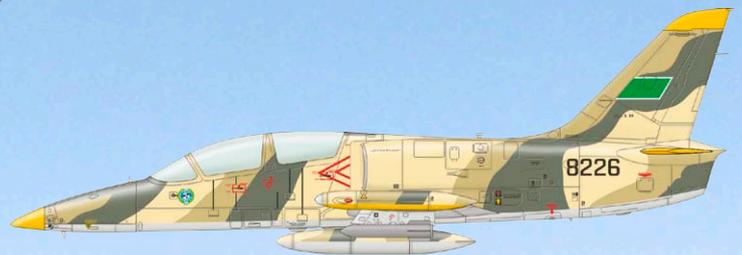
BUY Fw 190A-7 1/48

L-39ZO Weekend

1/72 Cat.No. 7416



Air Force Academy,
AZ Zawiyah Air Base,
Libyan Air Force, 1985

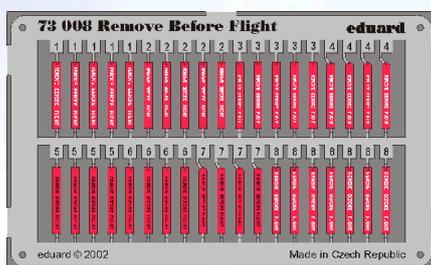


The Weekend edition of 1/72 L-39 offers the ZO variant in marking of the Libyan Air Force around 1985. High quality decals printed by Eduard.

BUY L-39ZO 1/72

We recommend:

73008 Remove Before Flight 1/72



7501 Czech AF 1/72

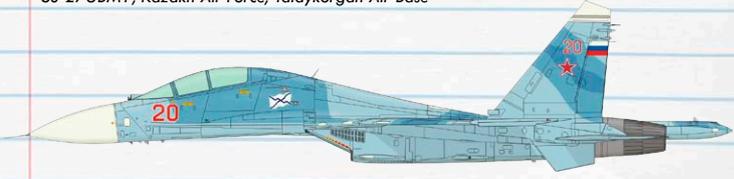


Su-27UB LIMITED EDITION

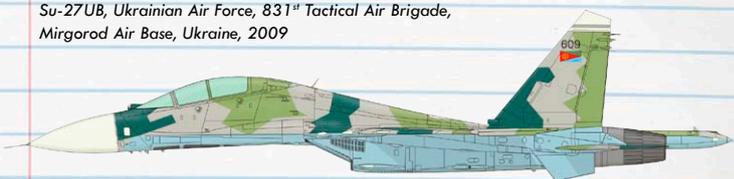
1/48 Cat.No. 1168



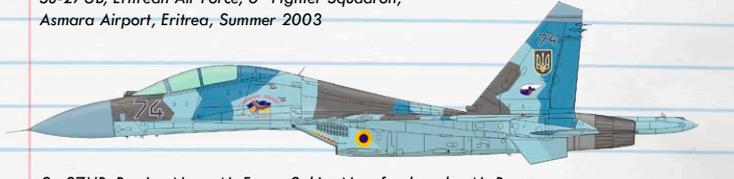
Su-27UBM1, Kazakh Air Force, Taldykorgan Air Base



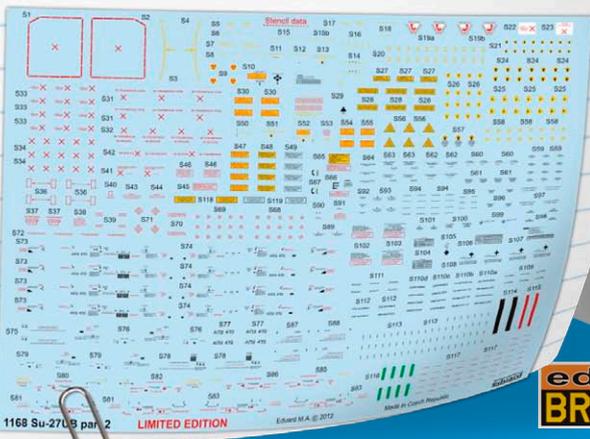
Su-27UB, Ukrainian Air Force, 831st Tactical Air Brigade, Mirgorod Air Base, Ukraine, 2009



Su-27UB, Eritrean Air Force, 6th Fighter Squadron, Asmara Airport, Eritrea, Summer 2003



Su-27UB, Russian Navy Air Force, Saki – Novofedorovka Air Base, Ukraine, August, 2010



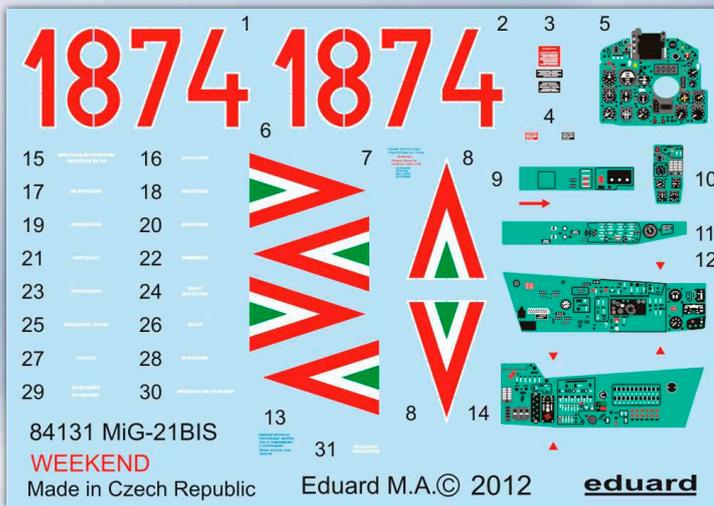
Limited edition kit of the two-seater Flanker is based on Academy upgraded plastic. An Eduard BRASSIN cockpit interior, including seats, and the front landing gear mud-guard are great highlights of this kit, supported by a large color photo-etched set, a canopy mask and large decal sheet designed by Eduard and printed by Cartograf. Brassin pilot's bone dome in two pieces as bonus. Only 1500 pieces produced.

BUY Su-27UB 1/48 



MiG-21 BIS Weekend

1/72 Cat.No. 84131



**Izdelye 75AP, 31st „Kapos“ Tactical Fighter Wing,
2nd „Boszorkany“ Squadron, Taszár AB, September 1991**

In 1991, it received a temporary white coloring on the rear of the fuselage and a portion of the bottom. In this guise, it took part in 'DACT' (Dissimilar Air Combat Training) exercises, in which the opposing aircraft pitted against each other were of differing types. Later, it was assigned to the 'Sky Hussars' demonstration team. In 2006, it was mothballed and put in storage at Papa, and in 2007, it was sold into the private collection of 'Gerhard Neumann Museum' at Niederalteich in Germany.

BUY MiG-21BIS 1/48 

We recommend:

- 48718 MiG-21BIS exterior
- 49587 MiG-21BIS interior S.A.
- FE587 MiG-21BIS interior S.A. Weekend
- 48704 MiG-21 ladder
- 48703 MiG-21MF accessories
- 648051 MiG-21BIS exhaust nozzle
- 648050 MiG-21BIS interior
- 648026 MiG-21 wheels
- 648030 MiG-21 seat early
- 648031 MiG-21 seat late
- 648047 IAB-500 imitation atomic bomb
- 648025 Rocket launcher UB-16 and UB-32



SELECTED

PHOTO-ETCHED SETS

36199
Canadian AVGP Cougar
1/35 Trumpeter



The March photo-etched collection is our usual reaction to other manufacturers' activities over the past couple of months, although it is often more like 'hyperactivity' given the goings on in 32nd scale. There are some highlights in other scales, and among them the two sets for the new 72nd scale Ju 88A from Revell are worth mentioning, as well as the 72nd scale collection of three sets for the Eduard Hellcat Mk.I. Note that set 72529 Hellcat Gun Bay is designed for the British Hellcats Mk.I and Mk.II especially. Other interesting sets will be the sets for the 48th scale Hurricane Mk.I by Italeri. Note also the set for Roden's UC-43/C-18, which is a very nice set – however, we understand this is designed for a marginal aircraft type. Also note the two new sets designed for our own MiG-21s in 1/144 scale.



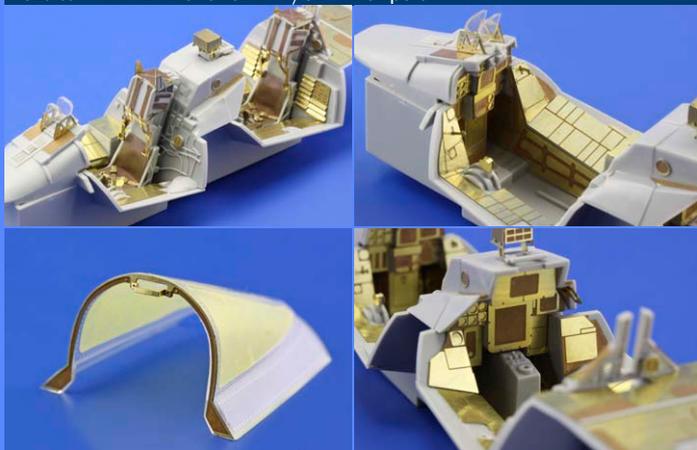
There is another very eye catching release in the 72nd scale line. This is a piece of the elevator area on a US NAVY WWII carrier. This is very nice piece, designed to be used as a base for the build-up kit. This production grouping will grow every month this year. These products lie between the photo-etched sets designed for aircraft kits and ships – this one is designed for aircraft, of course, although it is also a major piece of a ship. Concerning the ships themselves, we are releasing four sets of ship accessories in 1/700 scale in March.

The BIG ED collection is extremely interesting this month with the 32nd scale He 111P (REVELL) and P-51D (Tamiya) packs on the list. These types are real bestsellers in the single packing and trust us, they will be the money makers in the BIG ED packings, too!

For whole current photo-etched sets production see page 19.

PHOTO-ETCHED SETS

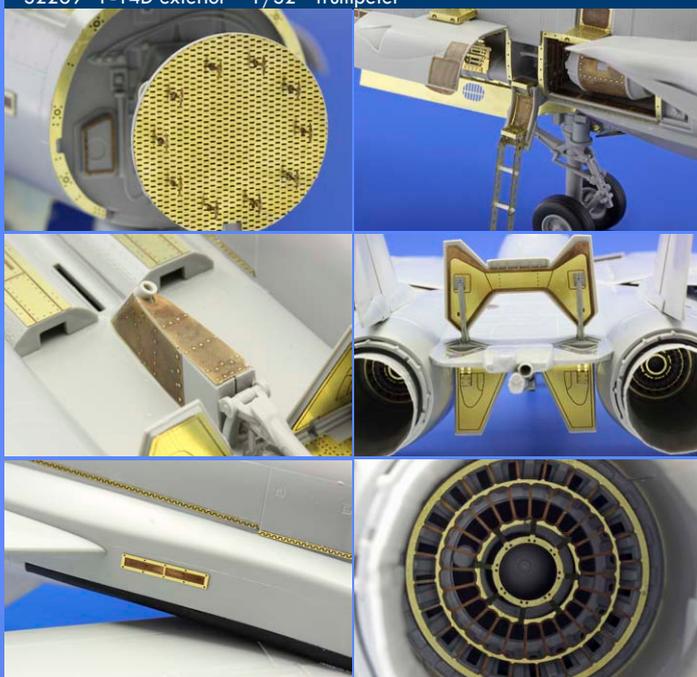
32707 F-14D interior S.A. 1/32 Trumpeter



32706 F-14D seatbelts 1/32 Trumpeter



32269 F-14D exterior 1/32 Trumpeter



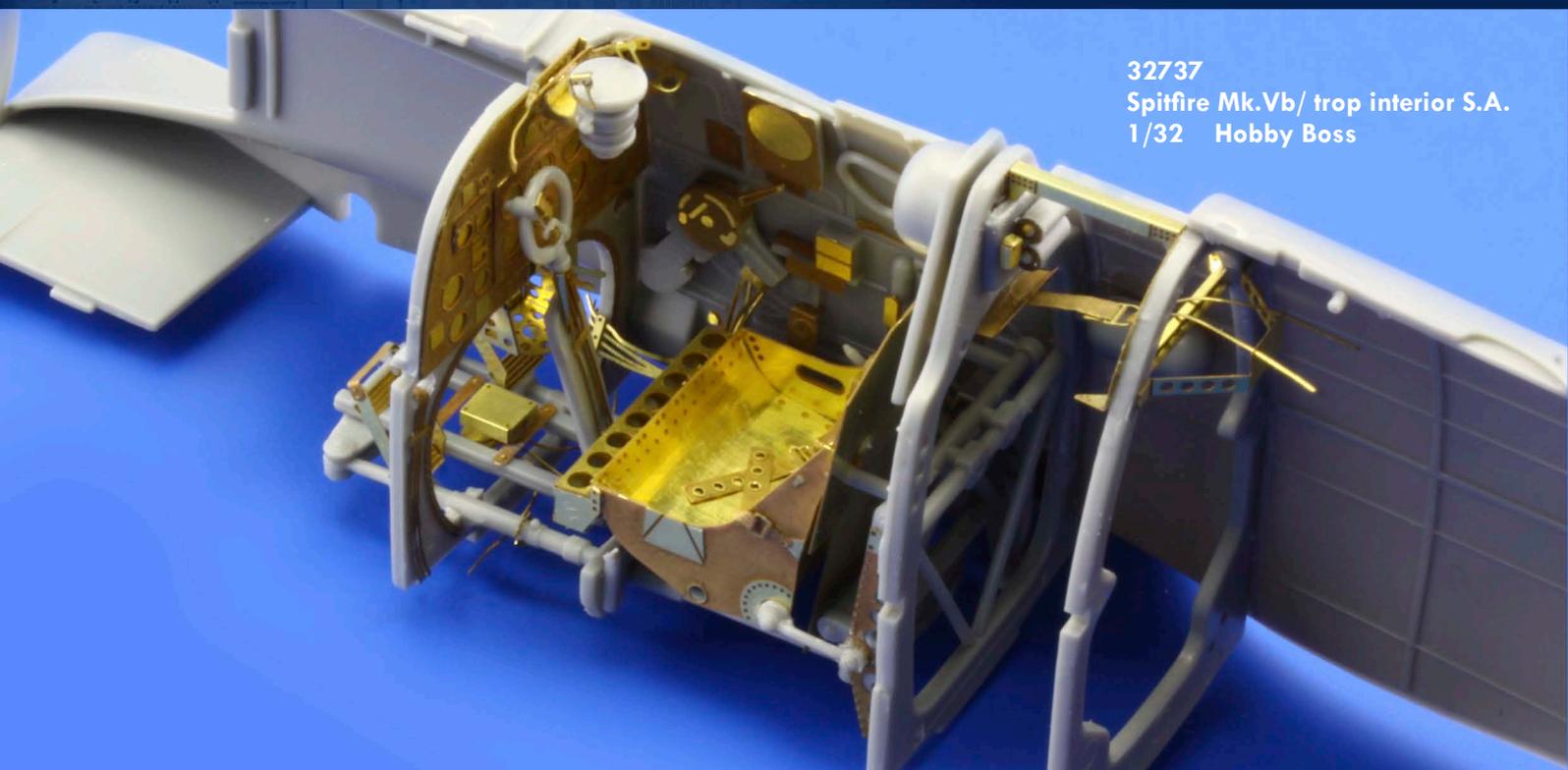
32310 F-14D undercarriage 1/32 Trumpeter



32269
F-14D exterior
1/32 Trumpeter

SELECTED

PHOTO-ETCHED SETS



32737 Spitfire Mk.Vb/ trop interior S.A.
1/32 Hobby Boss



32290 Il-2m exterior 1/32 Hobby Boss



32737 Spitfire Mk.Vb/ trop interior S.A. 1/32 Hobby Boss

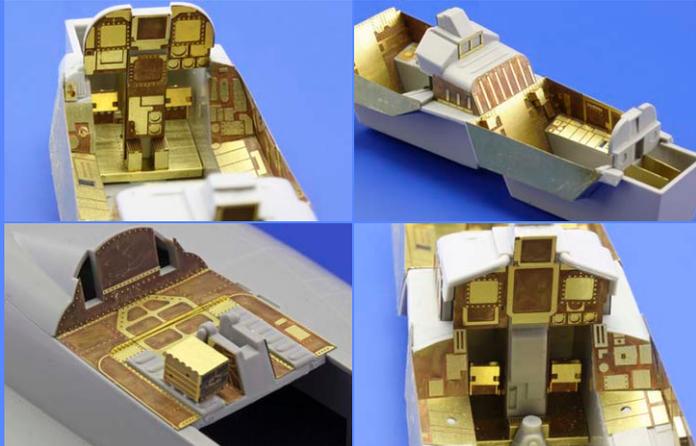


32308 Il-2m armament and bomb tails 1/32 Hobby Boss

For whole current photo-etched sets production see page 19.

PHOTO-ETCHED SETS

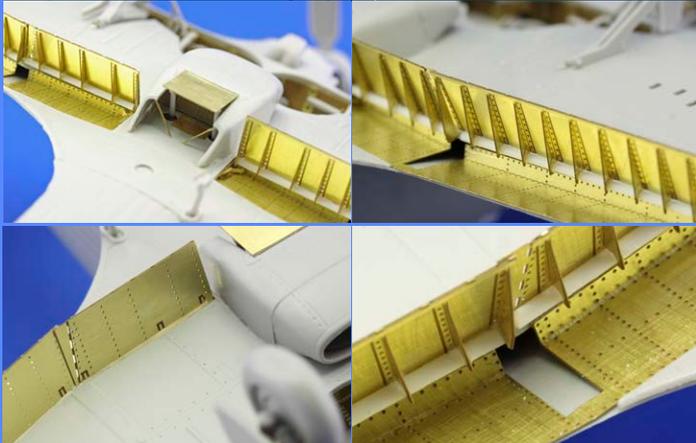
32735 EA-18G interior S.A. 1/32 Trumpeter



49583 Seafire F.XVII S.A. 1/48 Airfix



48724 Hurricane Mk.I landing flaps 1/48 Italeri

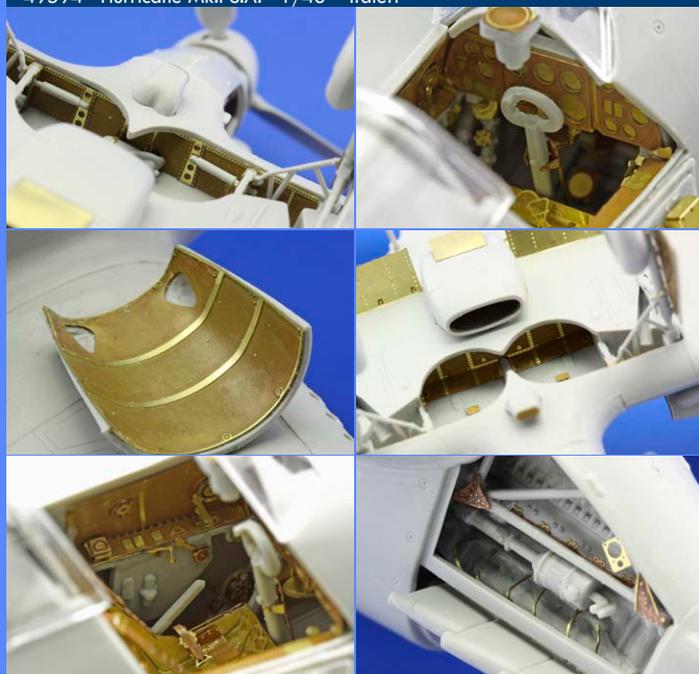


49583 Seafire F.XVII S.A.
1/48 Airfix

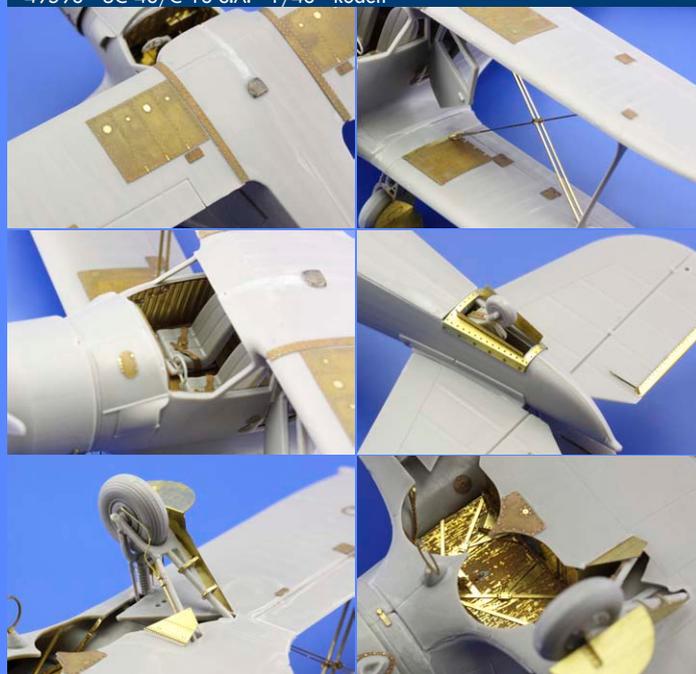
SELECTED

PHOTO-ETCHED SETS

49594 Hurricane Mk.I S.A. 1/48 Italeri



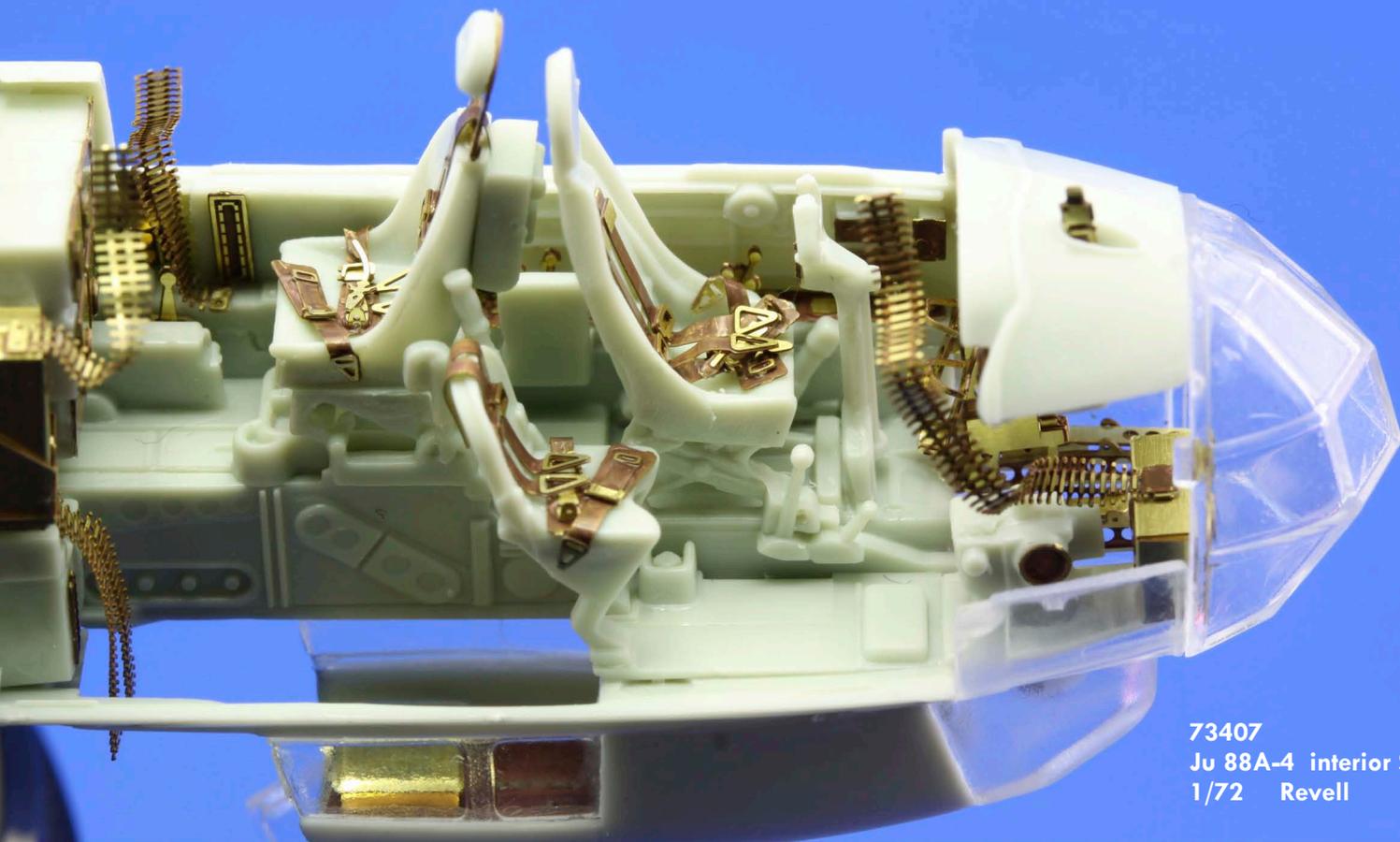
49593 UC-43/C-18 S.A. 1/48 Roden



49593
UC-43/C-18 S.A.
1/48 Roden

For whole current
photo-etched sets production
see page 19.

PHOTO-ETCHED SETS



73407
Ju 88A-4 interior S.A.
1/72 Revell

All above described sets are available separately, but with every BIG ED set you save up to 30%.

BIG ED



32293 He 111 bomb bay (BIG3311)



48693 Mirage 2000B/D/N exterior (BIG4964)



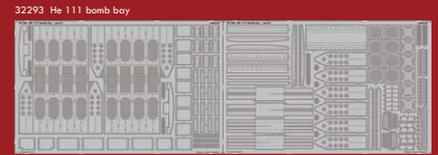
32302 P-51D exterior (BIG3312)



73412 F6F-3 interior S.A. (BIG7273)

- BIG3311 He 111P 1/32 Revell**
- BIG4964 MIRAGE 2000B 1/48 KINETIC**
- BIG3312 P-51D LATE 1/32 TAMIYA**
- BIG7273 F6F-3 1/72 Eduard**

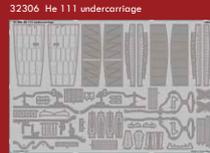
BIG3311 He 111P 1/32 Revell



JX127 He 111P



A complete collection of photo-etched accessories for Revell 1/32 He 111. This collection contains sets for interior (color), seat belts (color), exterior, undercarriage, bomb bay and a painting mask.

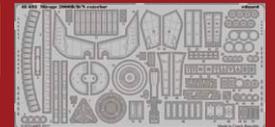


BIG4964 MIRAGE 2000B 1/48 KINETIC

49555 Mirage 2000B interior S.A.

EX325 Mirage 2000B/D/N 1/48

48693 Mirage 2000B/D/N exterior



A complete collection of photo-etched accessories for Kinetic 1/48 Mirage 2000B. This collection contains exterior, interior (color), painting mask and Remove before Flight tags (color).

BIG3312 P-51D LATE 1/32 TAMIYA

32715 P-51D interior late ser.20-35 S.A.

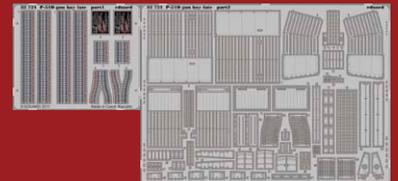
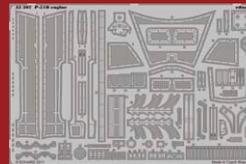
32731 P-51 seatbelts

32302 P-51D exterior



32307 P-51D engine

32721 P-51D gun bay late



JX136 P-51D



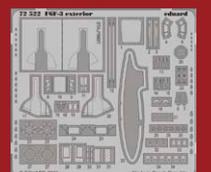
A complete collection of photo-etched accessories for Tamiya 1/32 P-51D in the late variant for series 20-35 (the early D variant is available as a BIG ED set as well). This collection contains exterior, interior (color), seat belts (color), engine details, late variant of gun bay and a painting mask.

BIG7273 F6F-3 1/72 Eduard

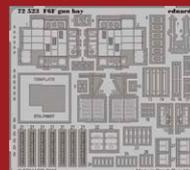
CX308 F6F

73412 F6F-3 interior S.A.

72522 F6F-3 exterior



72523 F6F gun bay



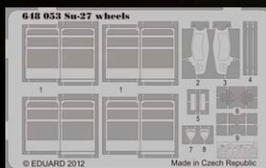
A complete collection of photo-etched accessories for Eduard 1/72 F6F-3 Hellcat. This collection contains exterior, interior (color), gun bay including the access doors and a painting mask. Eduard 1/72 F6F Hellcats, a target kit family for this set was awarded by the Model of the Year 2012 award by the Modellfan magazine.

1/48



648053 Su-27 wheels 1/48 Academy

Wheels for Academy / Eduard 1/48 Su-27 and Su-27UB kits. High quality reproduction of the main landing gear wheels with separate discs, gear leg accessories, the front wheel, plus its mudguard. Wheel chocks are included as bonus. Consists from resin and photo-etched parts, plus painting mask.



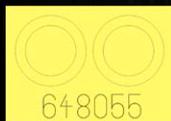
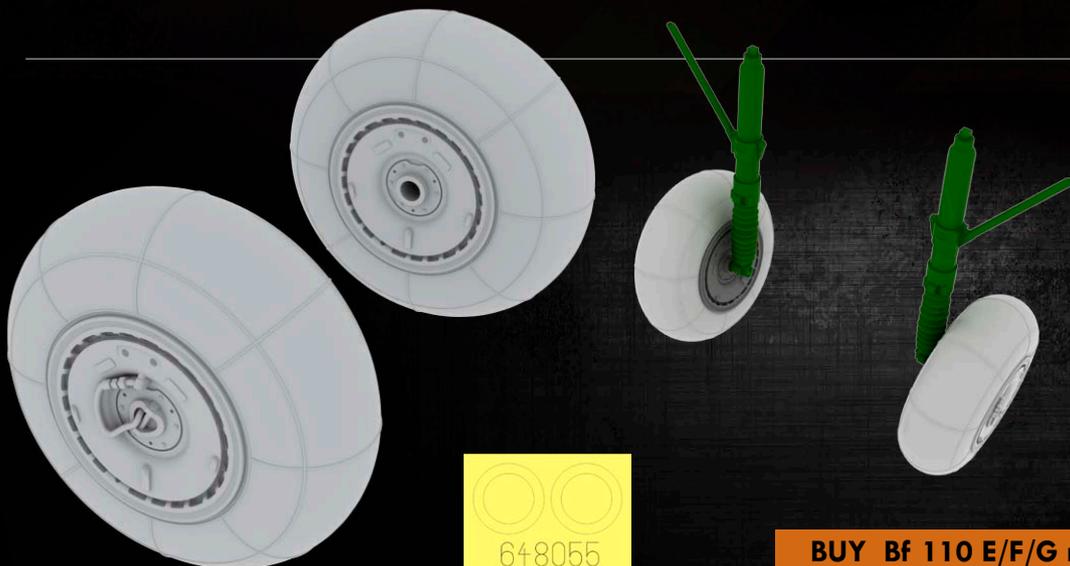
BUY Su-27 wheels

648054 Su-25K wing pylons 1/48

This is a set of wing pylons for the Su-25 1/48 kit by KOPRO, KP-MODELS, OEZ, Eduard. The set contains 8 pcs of the BD-3-25 pylons, 2 pcs of the BD3-25AKU pylons, 4 pcs of the PD-62-8 pylons (two versions), 2 pcs of the AKU-60-IM racks and 2 pcs of the APU-60-IM racks. Set consists from resin and photo-etched parts.



BUY Su-25K wing pylons



648055 Bf 110 E/F/G main undercarriage wheels

This set is focused mainly to the Eduard Bf 110 1/48 kits. It offers an accurate reproduction of the main landing gear in their late variant used on E, F, G versions. This set contains the resin main landing gear tires with separate discs and painting mask.

BUY Bf 110 E/F/G main undercarriage wheels

BIG BRASSIN = BIGSIN



SIN64801

F-16CJ Block 52 1/48

- | | | | |
|--------|------------------|--------|------------------------|
| 648008 | F-16 late seat | 648039 | F-16 air brakes |
| 648007 | F-16 late wheels | 648004 | F-16CJ Block 52 engine |
| 648033 | F-16 radar late | 490009 | Remove Before Flight |

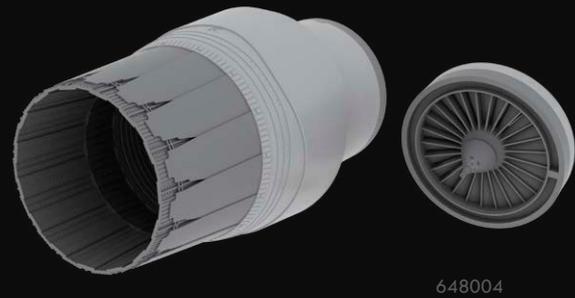
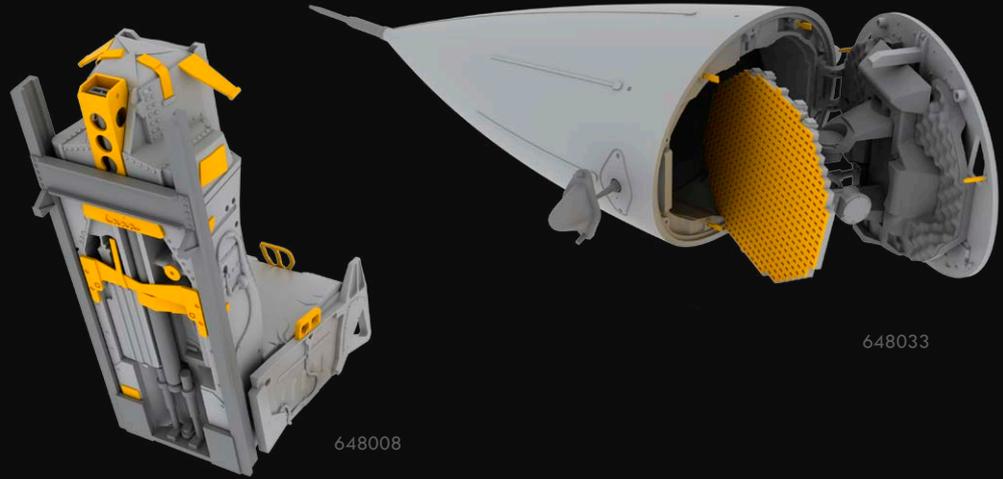
A complete set of Brassin accessories of the Tamiya 1/48 F-16CJ Block 52 kit.

It contains:

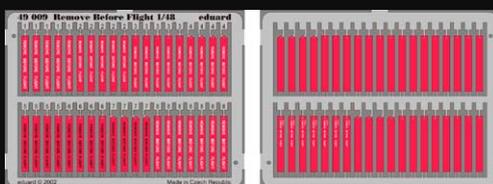
- seat in the late version
- late wheels (main landing gear and front wheel) including wheel chocks
- F100 PW-22 engine exhaust
- air brakes
- late radar with its radome
- photo-etched Remove before flight tags.

This collection consists from 36 resin parts, several photo-etched frets and a painting mask.

All above described sets are available separately, but with every BIG SIN set you save 10 to 15%.



49009 Remove Before Flight



eduard

KITS

8172	Fw 190A-7	1/48	ProfiPACK
1168	Su-27UB	1/48	Limited Edition
7416	L-39ZO	1/72	Weekend
84131	MiG-21BIS	1/48	Weekend

PHOTO-ETCHED SETS

144002	MiG-21SMT	1/144	Eduard
144003	MiG-21BIS	1/144	Eduard
32269	F-14D exterior	1/32	Trumpeter
32290	Il-2m exterior	1/32	Hobby Boss
32296	Spitfire Mk.Vb/ trop exterior	1/32	Hobby Boss
32308	Il-2m armament and bomb tails	1/32	Hobby Boss
32310	F-14D undercarriage	1/32	Trumpeter
32706	F-14D seatbelts	1/32	Trumpeter
32707	F-14D interior S.A.	1/32	Trumpeter
32733	EA-18G seatbelts	1/32	Trumpeter
32735	EA-18G interior S.A.	1/32	Trumpeter
32737	Spitfire Mk.Vb/ trop interior S.A.	1/32	Hobby Boss
32738	A-4F interior S.A.	1/32	Trumpeter
36199	Canadian AVGP Cougar	1/35	Trumpeter
36201	BTR-40 APC	1/35	Trumpeter
48724	Hurricane Mk.I landing flaps	1/48	Italeri
49577	F-5F S.A.	1/48	AFV Club
49583	Seafire F.XVII S.A.	1/48	Airfix
49593	UC-43/C-18 S.A.	1/48	Roden
49594	Hurricane Mk.I S.A.	1/48	Italeri
72528	Hellcat Mk.I exterior	1/72	Eduard
72529	Hellcat gun bay	1/72	Eduard
72531	Ju 88A-4 exterior	1/72	Revell
73407	Ju 88A-4 interior S.A.	1/72	Revell
73414	Hellcat Mk.I S.A.	1/72	Eduard
73418	USN Carrier deck 1942-44 lift area	1/72	
99036	USN Carrier Aircraft WWII	1/700	

99046	IJN anchors	1/700
99047	USN cable reel	1/700
99050	German doors and windows WWII	1/700

ZOOMS

33078	F-14D interior S.A.	1/32	Trumpeter
33102	EA-18G interior S.A.	1/32	Trumpeter
33107	Spitfire Mk.Vb/ trop interior S.A.	1/32	Hobby Boss
FE577	F-5F S.A.	1/48	AFV Club
FE583	Seafire F.XVII interior S.A.	1/48	Airfix
FE593	UC-43/C-18 S.A.	1/48	Roden
FE594	Hurricane Mk.I interior S.A.	1/48	Italeri
SS407	Ju 88A-4 interior S.A.	1/72	Revell
SS414	Hellcat Mk.I S.A.	1/72	Eduard

MASKS

CX305	P-40B	1/72	Airfix
CX306	A6M2 Zero	1/72	Airfix
CX307	EA-18G	1/72	Hasegawa
EX350	Fw 189	1/48	Great Wall Hobby
XT176	GTK Boxer windows	1/35	Revell

BIG ED

BIG3311	He 111P	1/32	Revell
BIG3312	P-51D LATE	1/32	Tamiya
BIG4964	MIRAGE 2000B	1/48	Kinetic
BIG7273	F6F-3	1/72	Eduard

BRASSIN

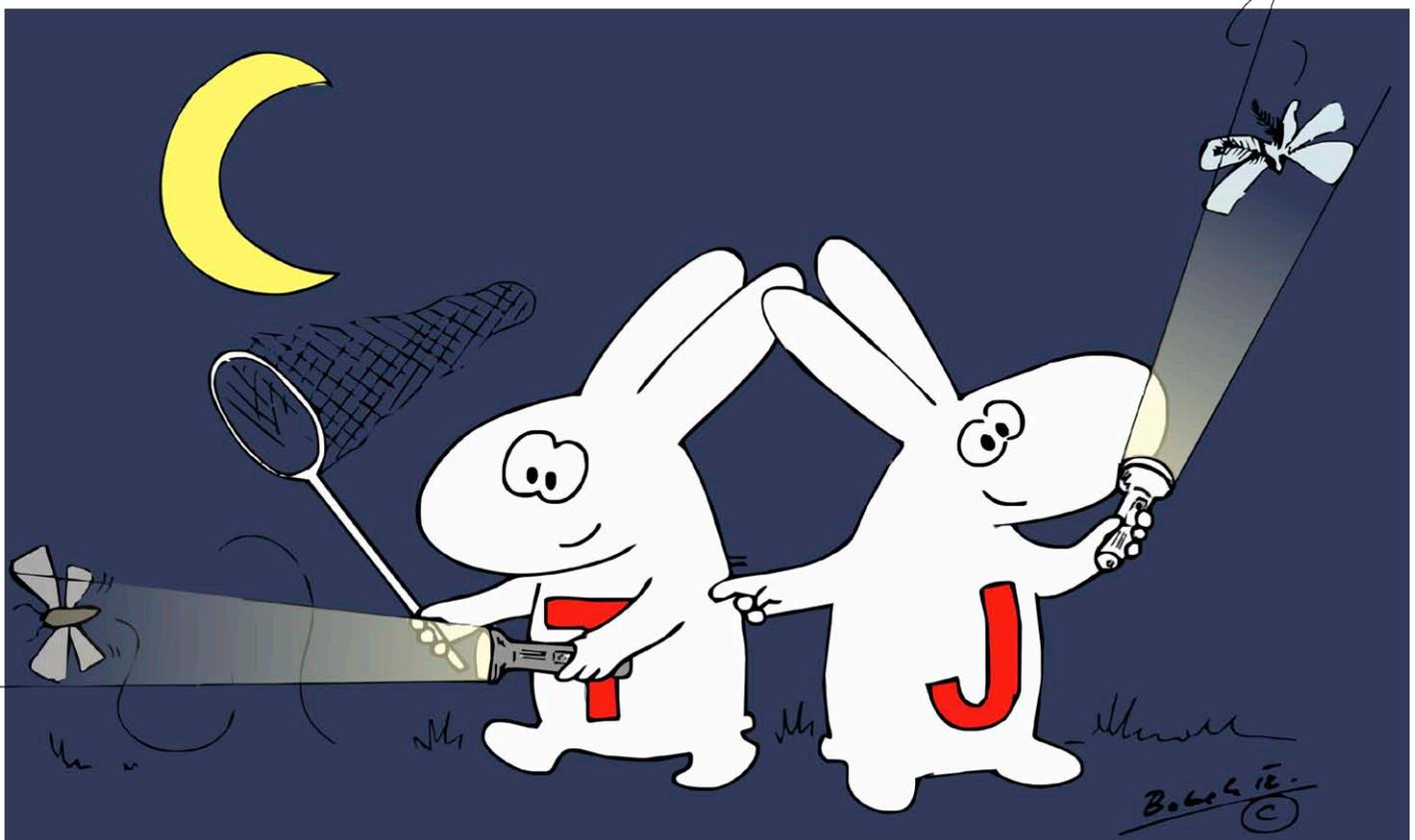
648055	Bf 110 E/F/G main undercarriage wheels	1/48	Eduard
648053	Su-27 wheels	1/48	Academy
648054	Su-25K wing pylons	1/48	

BIGSIN

SIN64801	F-16CJ Block 52	1/48	Tamiya
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Comments and input from J&T Eduard Nightmares hunting





THE FLANKER FILE

JOHN BUBAK

PART 2

Production of the Flanker began at Komsomolsk-on-Amur in 1982. Many problems continued to crop up during initial production due to the aircraft's complexities and advanced machining requirements associated with the titanium alloys selected for manufacture. The use of honeycomb milling procedures also needed refining, and the assembly of individual components was not always a straightforward affair either. Technical issues also arose, and went so far as to ground the Flanker fleet, but these adversities were remedied as they cropped up, and by 1989, sixteen air bases were operating the Su-27. Fine tuning was still found to be necessary, and through the first decade of production, over 100,000 modifications were introduced into the Flanker. The attention paid to the maturation of the design proved to be extremely successful, and the high level of co-operation between the plant and Sukhoi continued to pay dividends.

A Su-27 trainer was deemed necessary for development and deployment, owing to the

aircraft's radically unique qualities. This was dubbed the Su-27UB, and also became the basis for future multi-role versions, the potential of which was not lost on Sukhoi, as the Su-30. The aircraft's potential, as a two-seater, was understood to include the role of a sort of 'mini-

-awacs', suitable for the large geographic regions of Russia. As a long-range, two seat aircraft, it was first designated as the Su-27PU, and then the Su-30, and it incorporated an in-flight refueling system for increased range.



The Soviet press kept very quiet about the Su-27, and the western press remained very tentative. It was realized in the west that the production standard Su-27 differed significantly from its T-10 prototypes, and so it was given the reporting name Flanker 'B' by the NATO Air Standards Co-ordinating Committee. The first pictures to be published were in the Soviet Union in 1987. On September 13 of that year came the west's first real 'contact' with the type - pun intended. A Su-27 of the 941st AD Fighter Air Regiment intercepted a Norwegian P-3 Orion keeping

tabs on Soviet Naval maneuvers in the Barents Sea. The Flanker, piloted by Sr.Lt. Vassily Tsymbol, approached the Orion to the point where the Su-27's port fin tip contacted the Norwegian aircraft's outermost starboard propeller blades, causing significant damage to both aircraft. Both managed to land safely where they were supposed to, and there were no injuries. Contrary to western speculation, Tsymbol was not severely reprimanded, and was transferred to another regiment, but the obligatory bureaucratic party ensued.

A series of shots taken from board of Norwegian Orion, right before collision with the Su-27 „Red 36“. Note the pilot, Lt. Tsymbol. The last but one photo shows the Orion's damaged propeller. The very last photo shows an additional damage also on the Su-27 tail surfaces. (photos by Defense Command Norway, Flugrevue)

Inspired by the success and interest generated by the MiG-29 at Farnborough in 1988, the Su-27 followed suit in 1989 by being publicly presented for the first time at the Paris Air Show. Two aircraft took part, piloted by the noted test pilots Viktor Pugachov (Hero of the Soviet Union) and Yevgeny Frolov. The aerial displays proved to be a sensation, and easily the stars of the show. The Su-27 displays were highlighted by the now famous 'Pugachov Cobra', whereby the aircraft starts out in level flight, and pitches

the nose up through the vertical and 30 degrees beyond before falling back to level without any appreciable change in altitude. Pugachov honed this maneuver very carefully over time prior to showing it off. Western defence analysts were quick to express their opinions regarding the actual practical usefulness of such a maneuver under combat conditions, but they were evidently very surprised by, and obsessed with, it, eventually resigning to the fact that it may well be more than just an extremely cool stunt.



Pugachov's „388“ during exhibition.



Cockpit of Pugachov's display plane, the Su-27, No. 388.



Su-27 in Paris, 1989 claims a great respect in both, airborne, also as on the ground. (Paris photos by J. Lindberg)

The 'Cobra's' use as a demonstration tool was preceded by intense investigation into the Su-27's controllability at critical angles of attack exceeding 90 degrees, and studies were also made into the aircraft's spin characteristics. The aircraft was generally thought to be spin unrecoverable, but this proved to be unfounded, and even untrue. There have been several instances where the aircraft tended to recover from a spin on its own, even after one instance where the pilot punched out of the airplane during a spin, as was standard protocol early on when the Su-27 found itself in that situation.



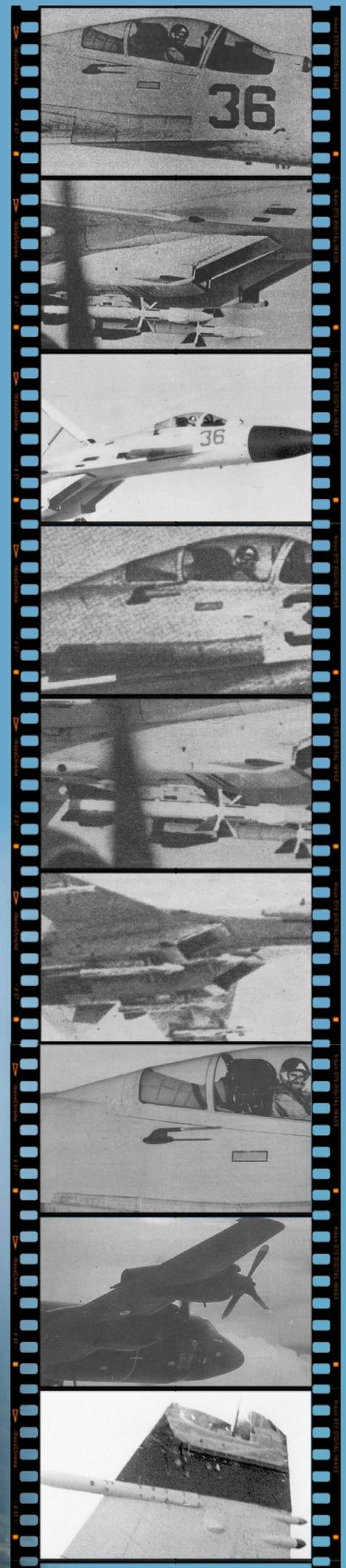
Most uncommon meeting on the end of the Cold War: Su-27 and F-16C. Paris, 1989.



Test pilot Viktor Pugachov



A Su-27 in the „Cobra“ position developed especially by the test pilot Viktor Pugachov.



HISTORY

The canards found on several versions of the Su-27 family were considered intermittently from the beginning. As was noted in Part One of this article, the elevators tended to lose their nose-down effect on the airplane at certain angles of attack due to the vortices generated by the wings, and the canards were considered, and implemented, as a recovery feature when needed. They are fly-by-wire controlled, and re-introduced lost instability as the aircraft centre of gravity shifted forward when, for example, heavier radars were installed. Other advantages to the canards became apparent, including an increase in airframe life.

In the mid eighties, there was another study and development program undertaken to further enhance the maneuverability of the Su-27. The Flanker with vectored thrust first left the ground on March 21st, 1989, in the form of the T10-26, flown by Oleg Tsoi, and the program also included Viktor Pugachov. The development of a vectored thrust arrangement for the Su-27 was very intense, and included a traditional axisymmetric arrangement as well as an innovative flat nozzle design. The flat nozzle design introduced certain inherent problems in transitioning from a round turbine to a rectangular (or flat) nozzle, including a (give or take) 15% loss in thrust. There were also additional bending moments acting on the nozzle panels, causing deformation, which required a significant strength increase requirement. This, naturally, meant an increase in weight as well - as much as a half a tonne per engine. This is despite the use of advanced lightweight carbon materials, but these, basically being coal,



A flight of China produced J-11.

burn, and so an effective heat shielding would also need to be derived. Although there was also an associated reduction in heat signature with the flat nozzle, it was decided that the more traditional axisymmetrical design would be better suited to the Su-27. The thrust vectored Flanker has been produced and put into service in the Su-30 version as requested by clients such as India. When the aircraft is powered down, the nozzles attain their natural state, which is inward and downward pointing.

The Su-27 has impressed a lot of important people, and the aircraft has found export success. The first true (non CIS) customer became China, who acquired the licensing rights to produce the airplane (but not the avionics nor the engines). By 1996, China had received some 48 Su-27s from the Russians before initiating production

as the J-11. The Russian built aircraft retained their Su-27 designation, and the only reliable way of telling these from the J-11 is by the serial number, but there has been a lot of confusion between the two, naturally. The Chinese received knock-down kits to gain experience in the assembly of the J-11, but Russian inspectors rejected the first of these on the grounds of inferior local workmanship. By December, 2000, the Chinese had begun to accept the Su-30MKK for its improved combat potential, although they were quite happy with all of the versions that they flew. The 'thirties' carry the local designation J-13, and by the fall of 2003, two batches of 38 aircraft each had been delivered. The Su-27/30 and R-73 combination has caused a stir in Australia, where China would be a major player in any regional conflict.



Vietnamese Su-27

The second client for the Su-27 was Vietnam. An initial order for six aircraft (five SKs and a UBK) was placed in 1994, and were delivered two years later. The next order for six aircraft was met with some really bad luck, when the An-124 with two Su-27UBKs tragically crashed with severe loss of life in the aircraft and on the ground. The UBKs were insured, and so were replaced. Another four aircraft were reportedly delivered in 2004 designated Su-30MK2V, and are apparently derived from the Chinese aircraft. Vietnam also was rumored to be looking to upgrade its extensive fleet of MiG-21s, namely by Hindustan, and if this has, in fact, occurred, the Su-27/30 could prove to be an effective command and control platform for these. Only speculation on my part, though.



Ethiopian Air Force Su-27
(photo Griffon)

The Ethiopian Air Force was the first African nation to take delivery of the Su-27 in 1998, and the order placed included six single and two two-seat aircraft. These were pitted against Eritrean MiG-29s purchased from Moldova, but they, having shorter claws and teeth, had a hard time against the longer range radar and weaponry of the Flankers. It didn't take too long for

Eritrea to begin efforts at sourcing the Su-27 for itself. Details on the Eritrean aircraft are rather confusing, but they are in service.



Ethiopian Su-27 pilot

Extensive negotiations regarding avionics fit finally brought the Su-27 to the Indian Air Force. Initial deliveries were of aircraft to the Russian standard, but later batches included the Su-30MKI with specific western or Indian equipment, canards and thrust vectored engines. Eventually, all of the Flankers were to be brought up to the MKI standard. This was not deemed practical, and these aircraft were eventually replaced instead. Initial deliveries of the Su-30K came in the early summer of 1997. Full Indian spec aircraft began arriving in the summer of 2002. A licensing agreement was granted for Hindustan to build the aircraft to the tune of 140 MKIs, including the avionics and thrust vectored engines. As with the Chinese, initial assembly was made of Russian supplied knock-down kits, with gradual switching over to locally built aircraft entirely. Indian aircraft have taken part in several international exercises with the United States and France, and have fared well, impressing both the Americans and the French, though they may not like to admit too loudly.



Belarussian AF Su-27UBM
(photo: Wikipedia)

Indonesia acquired a handful of Su-27SKs and Su-30MKs (two each) with plans to buy more, and Venezuela began taking deliveries of the Su-30MK2 in late 2006. Both of these were direct results of American embargoes against the respective nations.

Angola has taken delivery of one single-seat Su-27SK and one Su-27UBK. The single-seater, serialled C-110, was lost on a training flight, and was erroneously reported, under different serials, as having been shot down. The UBK has been flown largely as a fast FAC aircraft, and has recently been adorned with the newer Angolan roundel (with a yellow outer border and no star) and a I-100 serial, an excellent development, if like me, you want a model of one in your collection. As a sidenote, those of you that are aware of the existence of the Su-24 in Angola and are wondering about its use in that air force, I hate to inform you that, like the single and two seat Su-27s, only one example was ever procured, never carried markings, and as far as I know, never was integrated officially into the Angolan Air Force. Apparently, it's in storage. Bummer.

Uganda ordered and began to take delivery by 2011 of the Su-30MK2, as well as some (three?) L-39s. These Flankers carry an attractive tan and forest green camouflage scheme with light blue-grey undersides, unique among the world's Flankers. Evidently, regional instability and an emerging oil industry made this procurement attractive.

North Korea is rumored to have a number of Flankers, but this can't even be confirmed at the moment. Insane paranoia on the part of that regime makes this a difficult air force to research. The United States and England have also reportedly taken delivery of one aircraft each for evaluation purposes.

Currently, the Russian Air Force has plans to begin taking delivery of the Su-37, a multi-role single seat advanced version of the Flanker, with a glass cockpit. Evidently, this definitive version is different from preceding Su-37 designated aircraft, including the cockpit layout and a lack of canards, but incorporating the vectored thrust engines. An interim upgraded version of the standard Russian Su-27 has been in service designated the Su-27SM, and incorporated minor external changes such as a centrally mountedIRST ball, and some additional antennae panels along with an enhanced mud moving capability.

Depending on the mission requirements, the Flanker can carry any modern Russian air to air weapon, including the longer range versions of the medium range R-27ER1 and ET1 missiles (AA-10 'Alamo'), and the R-73 (AA-11 'Archer') and R-77 (AA-12 'Adder') dogfighting missiles on up to eight underwing hardpoints (four per wing), one under each nacelle, and two in the tunnel between the engines. Straight Su-27s generally had one less (innermost) pylon under each wing than later versions. Again, depending on the variant and mission profile, a multitude of air to ground mud moving ordinance can be delivered, from up to 8,000kg of dumb bombs, napalm (generally translated as 'fire bombs') and cluster bomb units to smart weapons including the KAB500KR and KAB1500KR(L) guided bombs,

Kh29T/L, Kh-59ME and Kh-31 guided rockets. Drop tanks, as far as I know, are not an option, simply because there is no need for them. The Flanker boasts an unparalleled range, and an option for in-flight refueling.

With the opening up of the global military market since the fall of the Soviet Union, marketing strategies have required a certain amount of access to information. This is certainly the case with the Su-27 family, and some excellent resources are available, and anyone even remotely interested in Russian aviation should be aware of them. By no means the complete list, but several of the best have to be those associated with Tom Cooper. These include the two part publication called 'African MiGs', and is an up-to-date detailed study of the use of MiGs and Sukhoi in sub-Saharan Africa. I can't recommend these volumes highly enough. He is also associated with the website 'Air Combat Information Group', at acig.org, another very detailed resource dealing with world aviation and history. Several very good books have been published specifically dealing with the development of the Su-27 series, and these include, but are not limited to, 'Sukhoi Su-27' by Yefim Gordon in Midland's Publishing Famous Russian Aircraft line, and 'Su-27 Flanker Story' by Andrei Fomin (Air Fleet). Both are related accounts of the development of the Su-27 family and are comprehensive to say the least. Both feature extensive English text, and superb photography, and all are more than worth their weight in gold if you have any interest in this aircraft.

This concludes our article describing the development and use of the Su-27 family of aircraft. I would urge anyone interested to understand that this is all less than the tip of the iceberg, and it is a very interesting aircraft worthy of admiration and respect in terms of development, innovation, technological progress and use. It's also a story that is still developing.

Brassin accessories for Su-27

- 648041 Rocket launcher B-8M1
- 648043 R-27R/R1 / AA-10 Alamo-A
- 648046 Rocket launcher B-8M1 and loading cart
- 648048 R-27T/T1 / AA-10 Alamo-B



BUY Su-27UB 1/48



BUY Su-27 1/48



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I-16 related display with the latest Spain orange box in background.



Showcase contains examples of our photo-etched sets - aircraft.



One of the awards coming this year. Eduard was awarded by the Flieger Revue magazine and the IPMS Germany for the innovation approach to the modelling world. Upon their opinion the innovation approach was made by our MiG-21 family in 2011. There is only one this award within whole modelling world per year! We very appreciate their decision. Men on photo L-R: Karel Padar of Eduard, Detlef Billig of Flieger Magazine and Volker Helms of IPMS Germany. Thanks, gentlemen!



Another award came the very next day – this time we were awarded by two more medals by German ModellFan Magazine and the Geramond Publishing! While one award „Model of the Year 2012“ was given us for the MiG-21 family, the second was awarded to the F6F Hellcat in 1/72 scale. On this photo you may see smiling and happy Vladimir Sulc with Kai Feindt from ModellFan. Thanks to ModellFan and Geramond, we appreciate it!



Showcase with example of our kit production.



Eduard plants garden. A premiere of the palm leaves (seen in the middle).



Excellent MF model build by Petr Zatrepacek, where the Brassin cockpit, wheels and exhaust are included.

MiG-21BIS

1/48



Cat. No. 8232, Eduard

Built by Jiri Pospisil



Camouflage:

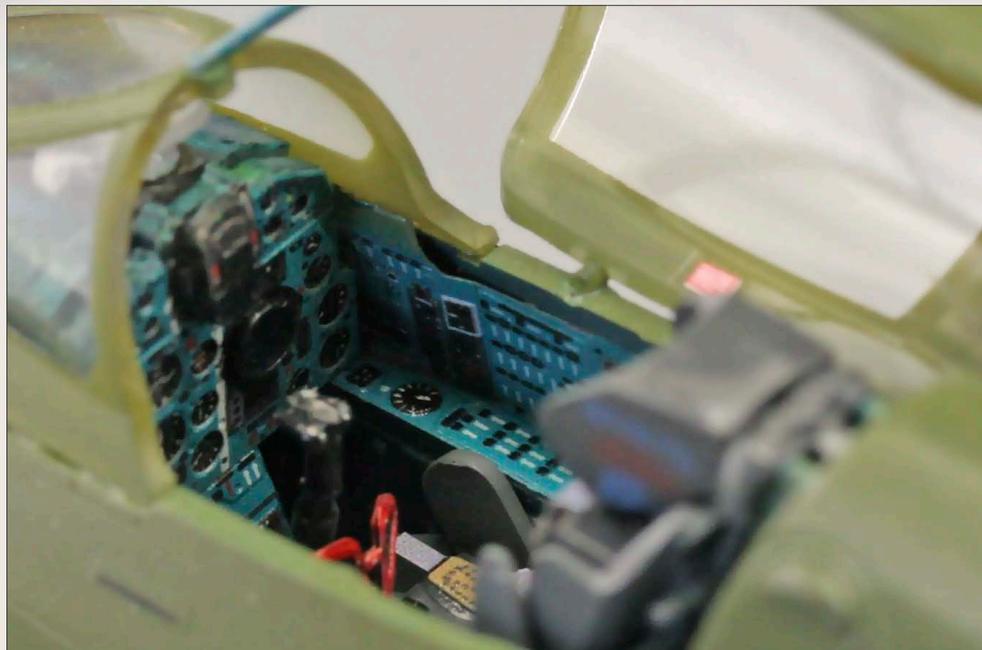
MiG-21BIS, Izdelye 75A, 31st Fighter Squadron, Kuopio airbase, Finland, 1980 - 1981

This airplane was serialized 75084300, and was accepted for service on July 17th, 1980. It first served with No. 31 Fighter Squadron (Hävittäjälentolaivue 31, abbreviated to HävLLv 31), and became the last of six Finnish MiG-21BIS fighters to be reconfigured for reconnaissance. After the modification, the aircraft was assigned to TiedLLv (Reconnaissance Squadron). It ended service as a teaching aid at the Technical School located at the Kuopio Air Base. The aircraft is shown as it appeared between 1980 and 1981 before being modernized with western avionics, that included cockpit instrumentation.



[BUY MiG-21BIS 1/48 ProfiPACK](#)

[BUY MiG-21BIS 1/48 Weekend](#)





La-7 1/48

La-7 Lt.Col. S. F. Dolgushin, the CO of the 156th FAR

built by Stefan Fraundorfer





Full review of this model was published at <http://kitchecker.de>



84144
Bf 110E
1/48 Weekend



8224
F6F-5 LATE
1/48 ProfiPACK



4427
MiG-21BIS
1/144 SUPER44



R0007
Bf 109E
1/48 ROYAL CLASS

BIG ED

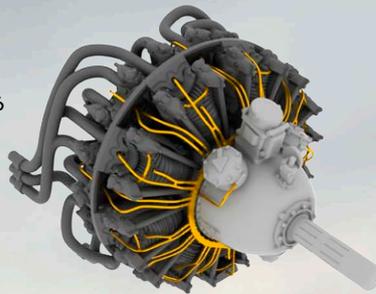
APRIL 2012

- BIG3313 Su-25 1/32 TRUMPETER
- BIG4965 S-2E 1/48 KINETIC
- BIG4966 Fw 189A-2 1/48 GREAT WALL HOBBY
- BIG7274 F6F-5 1/72 EDUARD

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BRASSIN**

APRIL 2012

648056
R-2800-10 engine
1/48 Eduard



648056

648057
P-61 wheels
1/48 Great Wall Hobby



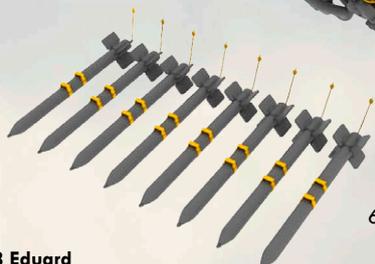
648057

648058
Bf 109E wheels
1/48 Eduard



648058

648061
HVAR rockets
1/48



648061

BIGSIN SIN64802 MiG-21BIS 1/48 Eduard

PHOTO-ETCHED SETS

APRIL 2012

PE-SETS

32288	EA-18G exterior	1/32	Trumpeter	73403	Su-33 Flanker D S.A.	1/72	Hasegawa
32300	EA-18G armament	1/32	Trumpeter	73409	T-33 S.A.	1/72	Platz
32309	F-14D armament	1/32	Trumpeter	73410	T-33 ladder	1/72	Platz
32313	J2M3 Raiden exterior	1/32	Hasegawa	73417	Akagi Carrier deck	1/72	
32736	J2M3 Raiden interior S.A.	1/32	Hasegawa	73421	USN Carrier deck 1942-44	1/72	
32739	A-4F exterior	1/32	Trumpeter	73427	P-40B S.A.	1/72	Airfix
36186	BTR-60P APC	1/35	Trumpeter	99053	IJN watertight doors WWII 1/350	1/350	
36203	British Light Tank Mark VIB	1/35	Vulcan	99054	IJN ladders 1/350	1/350	
36206	Leaves Palm Washington Filifera colour	1/35		99058	USN Aircraft accessories WWII 1/350	1/350	
36210	Leaves Palm Cocos Nucifera colour	1/35					
48722	F-14B exterior	1/48	Hobby Boss	ZOOMS			
49591	F-14B interior S.A.	1/48	Hobby Boss	33101	F-84E interior S.A.	1/32	Hobby Boss
49596	I-16	1/48	Eduard	33105	J2M3 Raiden interior S.A. 1/32	1/32	Hasegawa
53054	Chokai 1944 railings 1/350	1/350	Aoshima	FE591	F-14B interior S.A.	1/48	Hobby Boss
53055	Chokai 1944 1/350	1/350	Aoshima	SS403	Su-33 Flanker D S.A.	1/72	Hasegawa
72538	Ju 88A surface panels S.A.	1/72	Revell	SS409	T-33 S.A.	1/72	Platz
73399	Seahawk FGA.9	1/72	Hobby Boss	SS427	P-40B interior S.A.	1/72	Airfix



53055 Chokai 1944
1/350 Aoshima



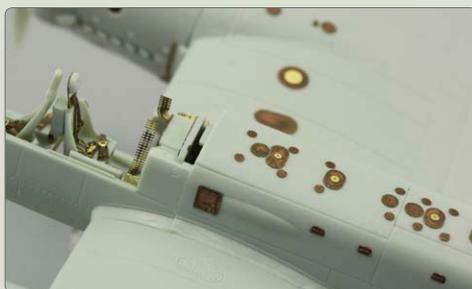
32313 J2M3 Raiden exterior
1/32 Hasegawa



36203 British Light Tank Mark VIB
1/35 Vulcan



73427 P-40B S.A.
1/72 Airfix



72538 Ju 88A surface panels S.A.
1/72 Revell



36186 BTR-60P APC
1/35 Trumpeter

Eduard Holiday, Inc.

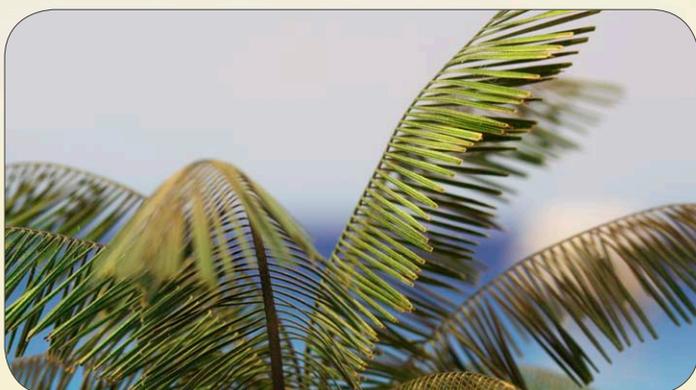
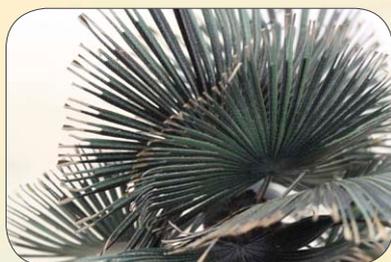
Sex On The Beach!



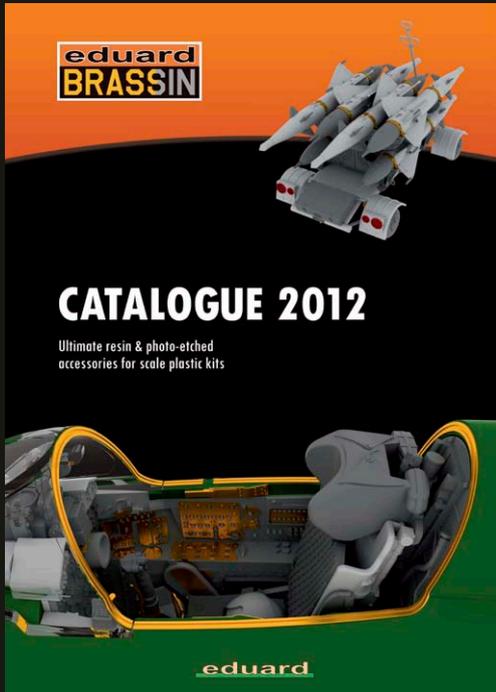
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COLOUR PHOTO-ETCHED ACCESSORIES 1/35

- 36206 Leaves Palm Washingtonia Filifera colour (04/12)
- 36207 Leaves Palm Howea Belmoreana colour (05/12)
- 36210 Leaves Palm Cocos Nucifera colour (04/12)
- 36197 Fauna - water animals/fish colour (12/11)
- 36198 Fauna - small animals colour (12/11)

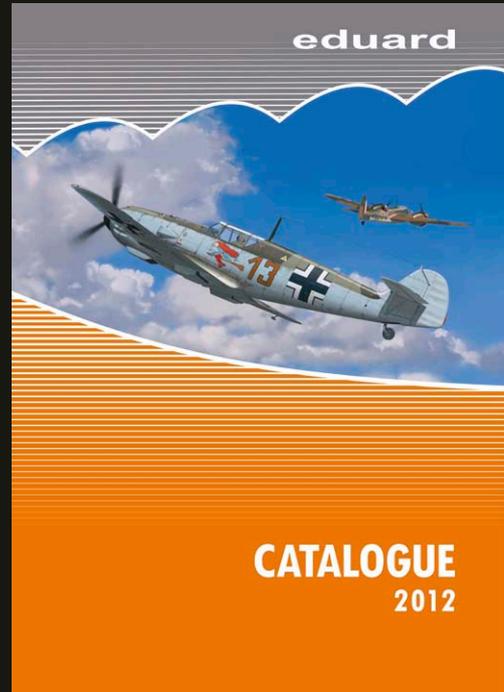


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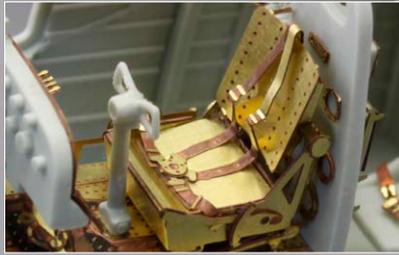
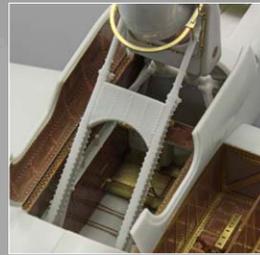
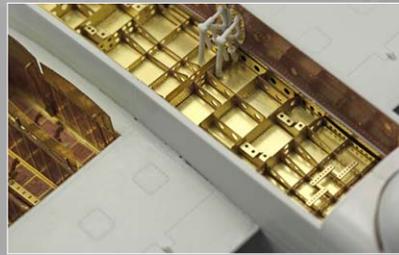
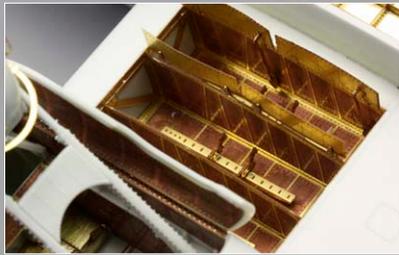


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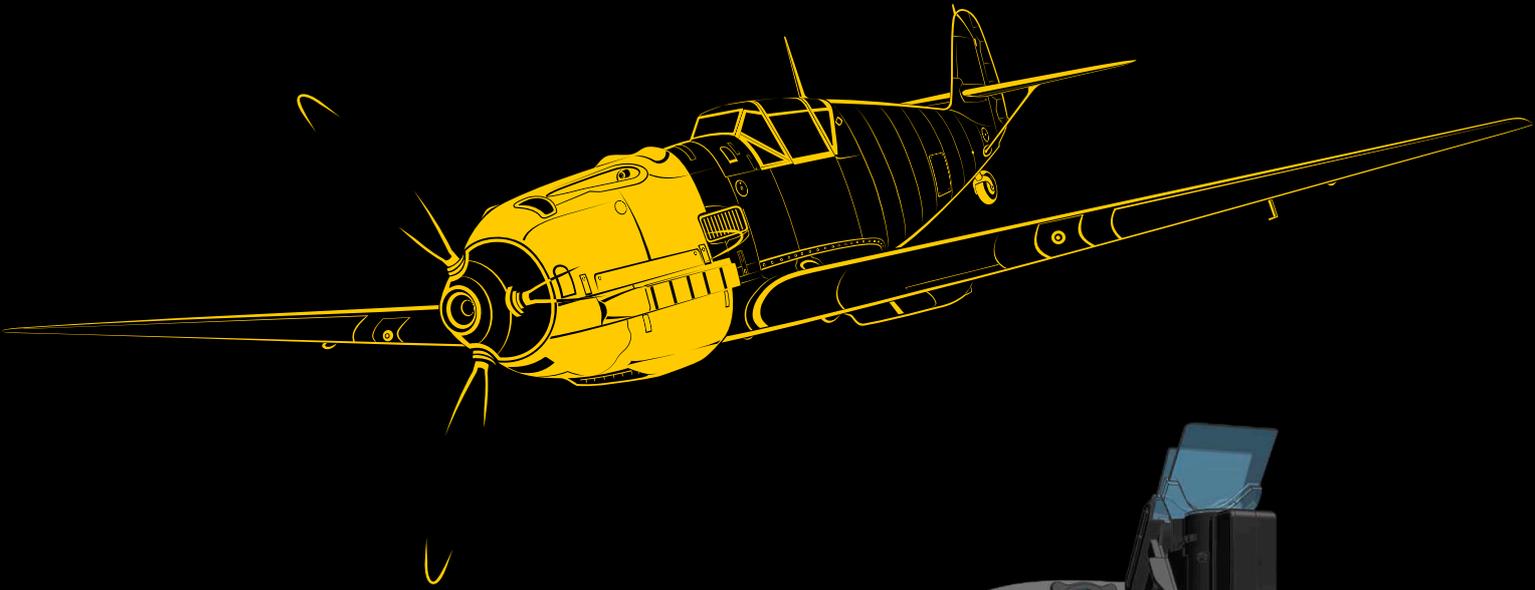
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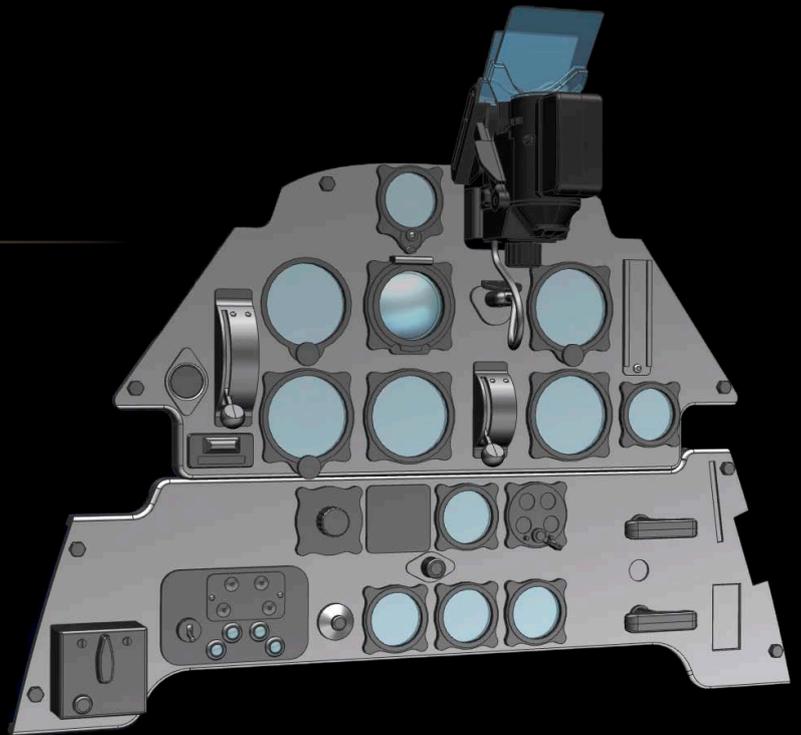


ROYAL CLASS

Bf 109E 1/48



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- ▶ Decals covers twelve colorful and famous markings.
- ▶ Eduard Brassin wheels.
- ▶ 1/4 scale Bf 109E control panel with Revi 12C gunsight.
- ▶ A metal coffee thermocup with engraved artwork of Bf 109E. The WWII style manufacture plate on reverse side contains a limited edition unique numbering.




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Werk-Nr	R 0007 0001
Hersteller:	Eduard GmbH Obernitz

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