

INFO

EDUARD

VOL 11 • ISSUE 12 • DECEMBER 2011



BRASSIN
MiG-29
seat early 1/48



MiG-21BIS

WHAT'S CHANGED, WHAT'S NOT



BUILT
Lysander Mk.III
1/48 Eduard

HISTORY

MiG-21BIS á la Eduard

INFO

EDUARD

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

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ON APPROACH

January 2011



eduard

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EDITORIAL



Our Miguary activities are culminating with the upcoming end of the Miguary year, with the MiG-21BIS. There were some flames around this one on some of the internet forums, even before the kit was released, which is quite unique. Besides the correct type designation, the nose dimensions were also criticized. As to the correct type designation, I'm not sure which one is actually correct. This project was originally planned as the MiG-21bis, which is the commonly used type name, but latter we found that the type, or version, designation used in the export manuals was "BIS". This was the reason why we decided to change the type name to BIS. I absolutely understand that "bis" is a very common designation, and I also understand the origin of the word "bis". Unfortunately, it doesn't mean the author of the manuals understood this as well. It seems there were more variants of this type name, not only "bis" or "BIS", but also "Bis". Therefore we decided to use "BIS". If you think

this is incorrect, use "bis". If the designation "BIS" written on the Eduard boxes disturbs you, simply take your pen and mark it "bis". Just don't ask me to pay you your marker then!

Concerning the noses of the "BIS" and "MF", it is simple; they were different. And, thanks to the stainless steel intake ring, which is shorter and wider, that difference is clearly seen. We created the new intake ring for the "BIS" version, but didn't change the front nose section next to intake ring, in front of the base for the pitot tube. The reason in doing so is that the difference of the truly accurate scaled nose and our kit nose is very marginal. When measured, the difference is only 0.38mm of the entire diameter at the top point of the curve, when the difference is split between both halves of the fuselage. I will explain how we made this decision more in depth, in a separate article. I feel certain that even with this small 0.38mm difference, we captured the nose very well. You can be sure that we will not do a Brassin correction nose for BIS, and if anyone here at Eduard comes up with such an idea, he will be told to find another job!

While our new website is very busy, the page is still not absolutely perfect. We will continue to fine tune it as well as work hard on new promotions, such as the MiG-21BIS Overtrees now in December.

December Info comes in a slightly modified structure form with a shorter foreword. Some

information, formerly included in the foreword, has been moved to the product group's introduction pages. The product pages now include the related products links. We hope these changes will help you to better locate our new releases and better navigate our famous web magazine. After all, it is a magazine, of course! Questions could have interesting answers after New Year, because the future will surely be turbulent. Which, I guess, is not so wrong.

Keep modeling!

Vladimir Sulc

MIG-21BIS

WHAT'S CHANGED, WHAT'S NOT.

The following article describes the changes and the reasoning behind them within the transition from our 1/48th scale MiG-21MF to the BIS. I will also endeavor to explain the rationale behind dropping some initially planned and announced changes. Starting with the most obvious, the nose:

Vladimír Šulc

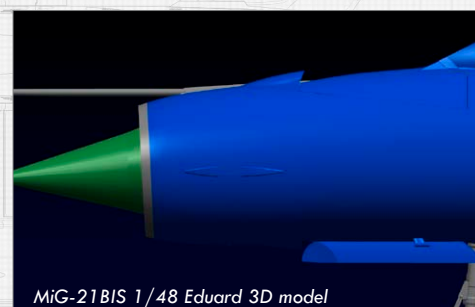
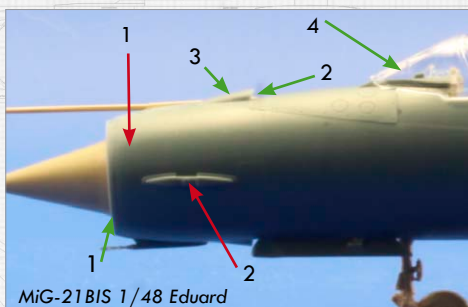
NOSE SECTION

NOSE SECTION CHANGED:

1. INTAKE FRONT RING. Correct front ring leading edge diameter. Ring depth correct, BIS fuselage length 40cm shorter compared with the MF, 0.833cm in 1/48th scale.
2. WINDSCREEN WASH TANK COVER, TOP OF THE NOSE, IN FRONT OF CANOPY; TWO VERSIONS.
3. SCREEN WASH TANK.
4. WINDSCREEN, SIDE WINDOWS

NOSE SECTION UNCHANGED:

1. DIAMETER INCREASE BETWEEN INTAKE FRONT RING AND PITOT TUBE BASE
2. ANGLE OF ATTACK INDICATOR BASE ON THE LEFT SIDE OF THE NOSE.
3. PERFORATED AREA OF THE INTAKE CONE/RADAR COOLING.



COMMENT:

Nose area shape, specifically in comparing between the BIS and MF versions, has been intensively discussed in the past several weeks. As you will certainly know, the Eduard design team studied this difference very carefully and we spent tens of working hours investigating the BIS and MF nose section, as well as the rest of the aircraft. The final decision was completely my responsibility, and my final decision was to create a new and correct front intake ring, but not to redesign the whole fuselage for the MiG-21BIS project. The reasons for my decision are:

1. The difference itself is marginal when scaled; less than 0.38mm in the diameter of the nose section at the top (see picture). The difference is asymmetrical; 0.20mm on the bottom and 0.18mm on the top of the nose. What's more, the actual spot where the difference on the top of the nose is located, is under the pitot tube base, making the optical identification of any difference very tough, regardless if you are looking at the model or the real aircraft. The same idea applies on the bottom of the nose, if the RSBN antenna of the POLYOT OI ILS is mounted, because it is located on the top of the 'difference curve'.
2. Actually, the stainless steel nose intake ring is the most important aspect for the optical identification of the BIS and MF nose difference. The

blue area is MiG-21BIS Eduard
red line shows real MiG-21BIS



BIS front intake ring is about 0.833mm wider on the leading edge in 1/48th scale than the MF ring, where the MF ring is deeper by about 0.4mm, also in 1/48th scale. Our BIS intake ring is correct in its leading edge diameter as well as in depth. These dimensional differences are quite marginal too, however, when you compare the BIS with the MF, the ring difference is optically recognizable, thanks to the usual stainless steel

color of the ring. If the ring carries the fuselage color of the plane, or if you see one version of the aircraft only, it is not easy to pinpoint what version you are looking at.

3. I have had the unique opportunity to bounce between the BIS and MF in Luftwaffenmuseum in Gatow, outside of Berlin in Germany earlier this year. It was easy to see the difference in the front ring, but it was extremely tough to see any

MiG-21 BIS - WHAT'S CHANGED, WHAT'S NOT

Nose areas of MiG-21BIS (above), MiG-21MF (below).



BIS



BIS



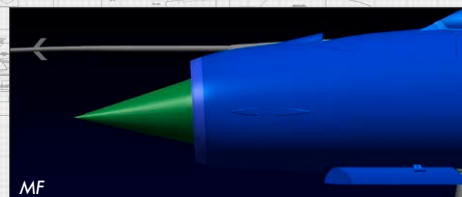
BIS



MF



MF

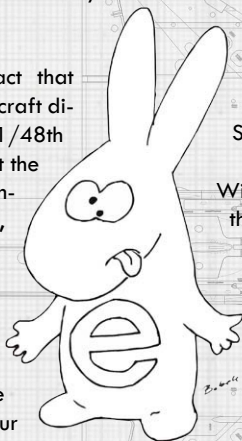


MF

difference in the rest of the nose area. The other five members of our party had the same trouble. Later, we saw the difference when we projected the dimensional data into the computer model. Nevertheless, the identified difference is so small, that we deem it too marginal for a 1/48th scale model.

You know our reason for our decision to keep the generic fuselage for the BIS and MF versions. We decided to concentrate our effort to more apparent and significant changes, specifically for the BIS. You have the right to criticize the decision now, but it is important to bear certain facts in mind to remain constructive: the diameter divergence in the point of the top amounts to 0.38mm, on a 20.3mm diameter, with a total fuselage length of 257mm. If you let these numbers sink in a bit, the whole firestorm just begins to look like a good joke. Guys...all of this stems from very intense research, and this is reflected in the design of what amounts to a very good end product.

Finally, I must point out the fact that I essentially compared the real aircraft dimensions, scaled to 1/48, to our 1/48th scale generic BIS/MF fuselage, not the real MF and BIS fuselage dimensions. It is also necessary to note, that our 1/48th scale MF fuselage is not absolutely correct in the nose section, because it is a teeny bit fatter in this section than it should be. It is interesting to note that no reviewer, especially those so passionately griping about our



BIS nose, has picked up on yet, which confirms to me, that such dimensional deviation is frankly marginal at best, and is in fact invisible without exact measurement verification.

The above text sounds very positive for us, right? Well, to be absolutely honest, we have the wrong base for the AoA indicator, a result of the rejection of a separate BIS fuselage idea. The difference is not so obvious here either, but we picked up on this a little too late to implement. Sorry!

With respect to the perforated cone area, this is still something of a technical mystery to us, as to how to incorporate this feature onto plastic. We decided to have this perforation as part of the photo-etched detail set in Eduard Photo-etched line.



BIS



BIS



BIS

photo: Gábor Szekeres

FUSELAGE SPINE AND VERTICAL TAIL

FUSELAGE SPINE & VERTICAL TAIL, YES:

1. SMALL FAIRING BEHIND THE CANOPY ON THE LEFT SIDE OF THE SPINE
2. RECTANGULAR FAIRING ON THE RIGHT SIDE UNDER THE BASE OF THE VERTICAL TAIL
3. TOP OF THE VERTICAL TAIL ON THE UHF ANTENNA COVER AREA (BIG TRAPEZOIDAL PANEL USUALLY PAINTED 'APPLE CART' GREEN)

FUSELAGE RIDGE & VERTICAL TAIL, NO:

1. SCREWS ON THE TOP OF THE SPINE BEHIND THE CANOPY.



BIS



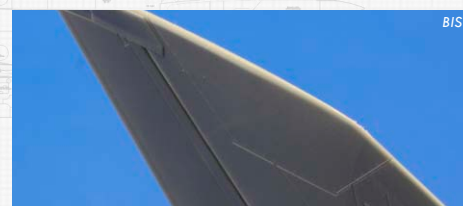
BIS

COMMENT:

The fuselage spine seems to be most important area for type identification, and represents type-specific basic shape changes between the real aircraft, as well as in the kit. We have completely redesigned this part, adding details specific to the BIS, such as the small fairing on the left side behind the canopy, or the large rectangular one on the right side. We also redesigned the top of the vertical tail in the UHF antenna cover area. It is difficult to identify, but we decided to modify it, because it is apparent on the real aircraft. However, although it is apparent, we did not identify it at first, and didn't make

the connection (and the resulting problem in this area in our MF and SMT kits) until later. There is a symmetrical quality to the profile of the entire tail of our 1/48 scale MF, but the profile is a little bit baggy in the UHF antenna cover area. When we first noticed that this area is different, we were quite surprised, but actually, it is just another marginal difference, interesting as it is, quite invisible in 1/48th.

The only detail change was not limited to the tail. There are two large screws on the top of the spine immediately behind the canopy. If you need them, you have to create them yourselves. Sorry.



FUSELAGE

FUSELAGE, YES:

NO CHANGE ON THE PLASTIC PARTS

FUSELAGE, NO:

1. CANNON LOADING DOOR.
2. CANNON
3. AIRBRAKE

COMMENT:

There are no changes to the fuselage section. The question is, what needs to be different, or what is really wrong for the BIS, and what is wrong for the MF.

1. Cannon loading door wasn't changed, because there is a late MF door on the fuselage, which is probably the same or similar to that used on the later BIS.



2. The cannon is modified by a photo-etched part, except for a specific Croatian variant, which is remedied in plastic. It has to be applied after the removal of the original piece. Our cannon well itself represents a late MF and BIS version, so it is correct, but I saw a review saying it is the wrong version.



3. Airbrake – we deem the difference to not be significant enough to warrant a new design.

4. Exhaust trailing edge represents the BIS version, so it is incorrect for our MF kits. However, not many comments have come to light over this marginal discrepancy, which is in the order of tenths of a millimeter.

WINGS

WING YES:

1. WING FENCES

WING NO:

1. SPOILERS FRONT OF WINGLETS

COMMENT:

Wing fences are another sample of the extremely subtle changes in these aircraft. Compared to the MF, the BIS fences are composed of three sections, with a small enlargement on the leading as well as on the trailing edge of the fence. Our fences are absolutely correct, but this design finesse is also rather invisible. At least the noted enlargements are unfortunately invisible, but, to

be absolutely honest again, it doesn't block me from being proud of them! I am also, and maybe even more so, proud of the top of the tail, and especially of the RSBN antennae, which I will explain later.

The winglet spoilers were not incorporated into the design because it represents another technical problem, and in this case not only applies to plastic, but also to photo-etching. It is simply beyond our technical ability. It was just a piece of thin plate on the real aircraft, and what we could do, would be too fat, or very difficult to apply if made as a photo-etched part because of its extremely small size.



AERIALS

There are plenty of various aerials in the BIS kit, created for various local air force variants, and I do not doubt that others are missing. The missing ones are surely significant, but probably a theme for another article. Some of the available aerials are created in plastic, some others are photo-etched, some others could be made in resin, if necessary. You know we can be flexible! And finally, just a few words about the RSBN antennae and why we are so proud for them. The RSBN antennae of the POLYOT OI ILS are the two antennas, one located under the nose, and the other on the top of the tail trailing edge, that look like a trident. We suspected that these parts are too fine to be injected in 1/48th scale,

but we decided to try it, but with an alternative version without the two thin side parts, with the base rod to be completed with photo-etched. We simply expected that it could be real problem to get a complete plastic injection with such thin parts. I am sure you know the situation, when something doesn't work, and after hours spent to find a way around the problem, all you can do is mutter 'damned thing's bugged!' Well, in this case we were just plain happy, immediately after the first tool trial, when we got a complete and beautiful plastic RSBN antenna. Never mind, that the side flats are a tad fatter than they need to be, and that the difference from the optimal thickness is probably bigger than



that damned nose difference, these antennae are simply beautiful! **WHICH IS WHAT WE ALL NEED AND WANT, GENTS!**

PLASTIC KITS

The “Miguary” Year will close in December with a big show – a final release of the top representative of that MiG generation - the MiG-21BIS. It's not very often that we can do something like with the quarter scale BIS: a release of a kit that was never designed correctly. While you may disagree, the good old OEZ Letohrad brought out a BIS several years ago, but had nothing common with a BIS. Because we have resolved not to change the main MF fuselage body, most of new parts are found on one frame. But this doesn't mean that there are just a small number of new parts. Other differences are covered by photo-etched parts. You may read about all the changes in a separate article in another location in this magazine. To reflect the importance of the BIS in the history of global aviation history, the kit is supplied with six marking options, something I feel to be a luxury by itself. By this way, decals are printed by Cartograf. It is necessary to add, that these markings are so colorful and interesting, that the selection of which scheme to use will be a hard task. Because of that, we have opened, once again, a special offer of MIG-21BIS OVERTREES, which will allow you to buy plastic parts with photo-etched set at a favorable price. This offer is for a limited time and will expire by the end of the year, so if you are interested, don't miss this opportunity.

Our second December kit release is a Limited Edition quarter scale Bf 110C/E in MTO. This good older kit is (as usually is the case in this edition) supplied by photo-etched set along with resin wheels. Perhaps you remember the heated debate about the wrong wheels in our Bf 110 kit. Well, during the first release of our Bf 110E, it went through a similar flame war on the forums as the MiG-21BIS nose, although the dimension deviation was smaller. You may, at least, see that the history repeats itself in the modeling world as well! In any case, what are found in the actual Limited Edition are the correct wheels for the C version, as well as for E and later versions. These wheels are not only correct, but are also very pretty and an interesting solution. Personally I think, it would be a hard task to find better ones and these are a good bonus for the actual release of that famous plane. There are five markings, including one Italian. Since this is an MTO related subject, we can't simply overlook Italy as a regional power country! So it is also fitting, that our own decal design was printed by Cartograf in Italy.

Like every month, a WEEKEND edition needs to be included in our offer. This time it is a 1/72 scale F6F-3 HELLCAT. You know this kit already, there is nothing new to write about,

but look carefully at its decals. Not Cartograf this time, but our own printing. I understand that a note about Eduard decals can cause measles or a panic attack for several customers, but with a detailed study of the actual decal sheet, you will see that things have changed there as well. New decals are to a very high standard and we here at Eduard are sure that they will satisfy even the most exacting customers. Pattern accuracy, colors, and smoothness are very fine here. As well as ease of application that is a weakness for Cartograf – although these Bolognian decals have our full respect.

AND WHAT ELSE?

This is the favorite question for a modeler to ask. Regrettably, we are actually at the end of the year and more information will come, as usual, in January. So, now in a nutshell: January will bring a Su-27 in 1/48 scale Limited Edition... in the absence of powerful storms around the worlds oceans. This Sukhoi has been significantly improved by Academy, which upgraded their tools, as well as by us. In this case, of course, by our resin Brassin and by photo-etched set and last but not least by attractive decals. Its price is... how to say diplomatically and not to frighten?... relatively high, but it is a good value for its high quality. So guys, this price is high like – you know what (fill in a word which was used also for a free pursuit by Luftwaffe night fighters in WWII – and translate it into your own language), but it's worth it.

I forgot to mention that in January, there will be four new items in the kit range. It is not so usual, but during next year it will happen. So next January's new kit will be another one 1/144 MiG-21, this time a SMT. It will be in a Dual Combo again, like the 1/72 scale Hellcat Mk.I/Mk.II.

The last one is an old, good, and everlasting Airacobra in the WEEKEND edition, this time as an N version and in Soviet marking, of course, in one of those colorful Guardian Units. For each of the mentioned kits, I would like to recommend that you study each decal sheet. All of them, but the Su-27, are again introducing Eduard new printing standard.



MiG-21BIS ProfiPACK

1/48 Cat.No. 8232



MiG-21BIS, Izdelye 75B, 3rd Air Base,
Graf Ignatevo, Bulgaria, from 2002



MiG-21BIS, Tactics & Air Combat Development
Establishment, Jamnagar airbase, India, September,
1986



MiG-21BIS, Izdelye 75B, 47th Combat Air Regiment,
Griff Squadron, Pápa airbase, Hungary, 1991



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



MiG-21BIS, 1st Air Division of Polish Navy,
late 90's, Gdynia - Babie Doly airbase, Poland



MiG-21BIS D, Izdelye 75A, 22nd Fighter
Squadron, Pula airbase, Croatia, 2008

OVERTREES: sprues, PE sets and mask

BUY MiG-21BIS 1/48

BUY Overtrees 1/48



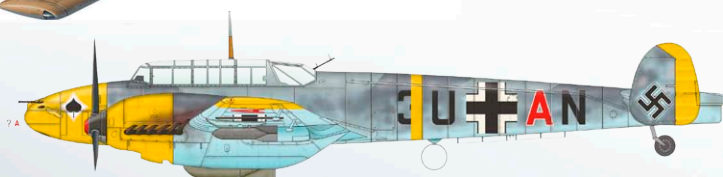
- 6 attractive markings
- Decals printed by Cartograf
- Express mask
- New color PE sets

- Alternate parts specific for actual version
- Antennae solution covers every particular plane from the marking selection
- New parts for the cockpit area
- Aerodynamic wing fences
- Modernized Croatian version

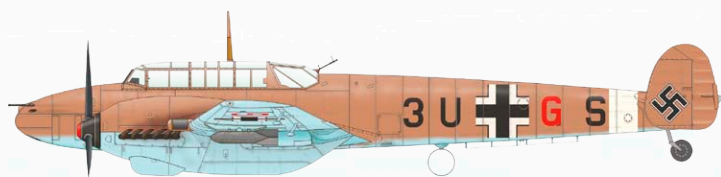


Bf 110C/E in MTO LIMITED EDITION

1/48 Cat.No. 1164



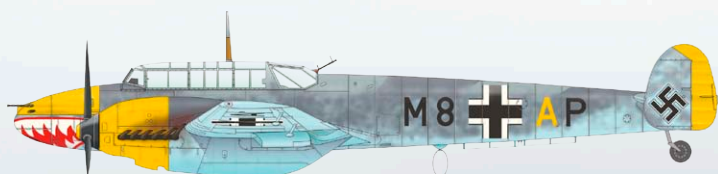
Bf 110E, Oblt. Theodor Rossiwall, CO of 5./ZG 26, Argos, Greece, May - June, 1941



Bf 110E Trop, 8./ ZG 26 (3U+GS), Derna airbase, Lybia, 1942



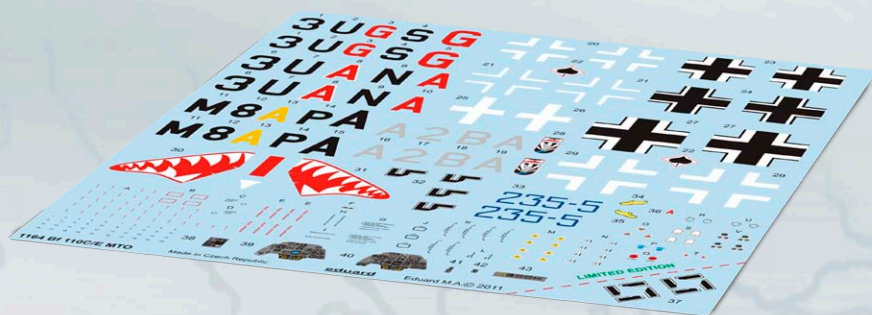
Bf 110C-3, 235a Squadriglia, Lonate Pozzolo Airbase, Italy, Spring, 1943



Bf 110E, Heinz Nacke, 6./ZG 76, Greece, 1941



Bf 110E, Nachtjagd Division, Mediterranean, 1941



Eduard Brassin
detailed wheels for
Bf 110 C & D and E,
F & G versions

BUY Bf 110C/E in MTO 1/48



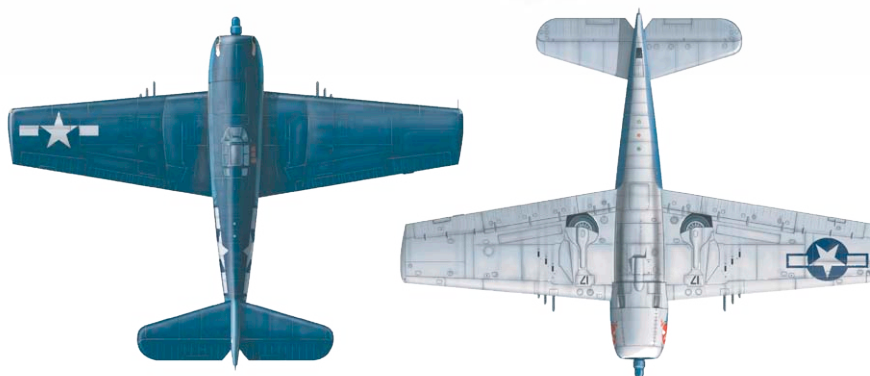
eduard
BRASSIN

F6F-3 HELLCAT Weekend

1/72 Cat.No. 7414



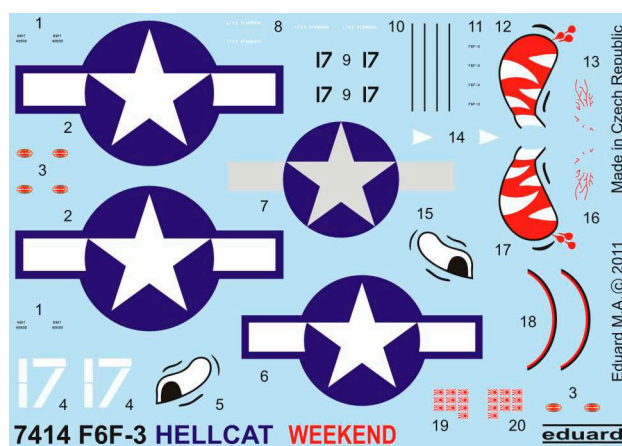
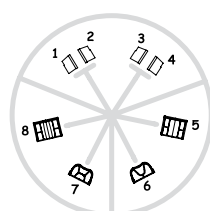
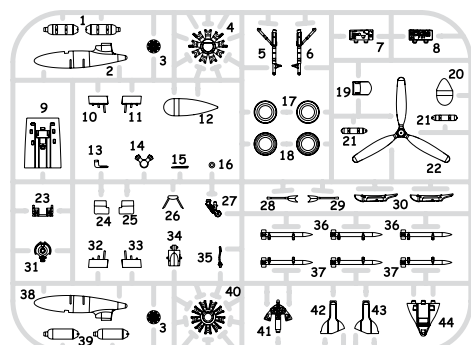
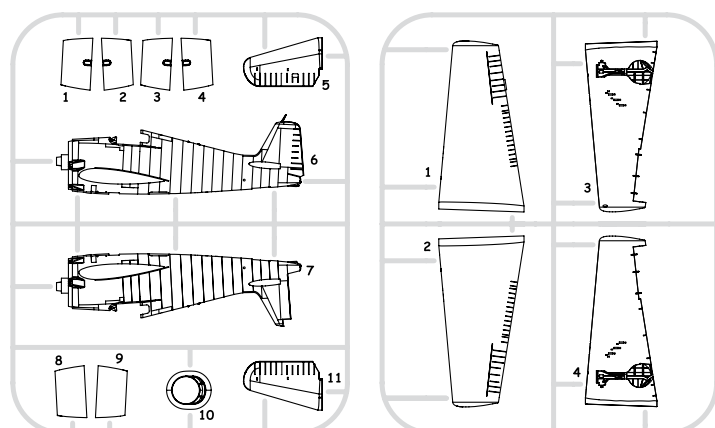
Surely, among the most recognizable markings carried by US Navy aircraft must be those of Hellcats of VF-27 flying off the USS Princeton. Hellcat bearing the number „17“ was the personal mount of LT R. E. Stambook. Stambook attained 11 kills during his combat career. The sharkmouths and bloodshot disappeared from the VF-27 Hellcats shortly after the Battle of Leyte Gulf, the Philippines. USS Princeton was sunk by Japanese naval bomber on October 24, 1944.



BUY F6F-3 HELLCAT 1/72



F6F-3, LT Richard E. Stambook, VF-27, USS Princeton, October, 1944

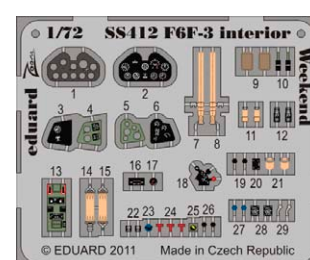


SS412

F6F-3 interior S.A. Weekend
1/72 Eduard

Photo-etched accessories -
Weekend Zoom

BUY SS412



SELECTED PHOTO-ETCHED SETS

There is again a large amount of photo-etched sets, so check them out from the largest ones to the smallest...

AIRCRAFT 1/32

1/32 scale is actually a very popular scale. Projects in this scale are usually large, so we need to release several separate sets to cover every kit. In December there are four kits, mostly from Trumpeter. Just the Spitfire Mk.XVI stays away. While the Spitfire and the A-4 Skyhawk will continue in January, December will see release of the whole collection of the Su-25K PE sets. Otherwise the Harrier GR.Mk.7 collection will be released completely in December. As this happens sometime, I am looking forward to the time when this would be not so rare, but a usual condition.

32716 Harrier GR.Mk.7 seatbelts 1/32 Trumpeter



32717 Harrier GR.Mk.7 interior S.A. 1/32 Trumpeter



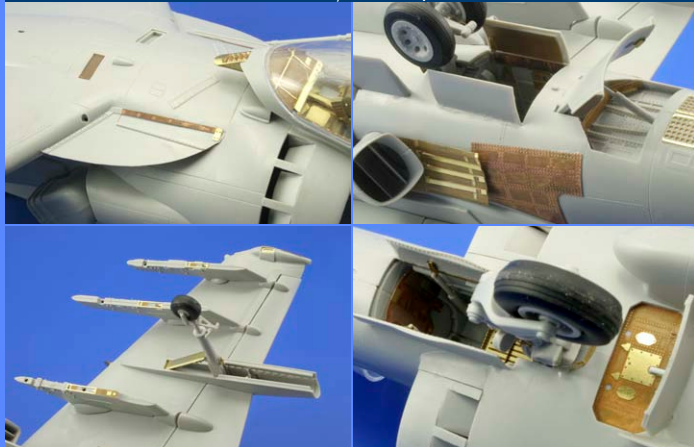
32719 A-4E interior S.A. 1/32 Trumpeter



32724 A-4E Escapac IA-1 seatbelts 1/32 Trumpeter



32295 Harrier GR.Mk.7 exterior 1/32 Trumpeter



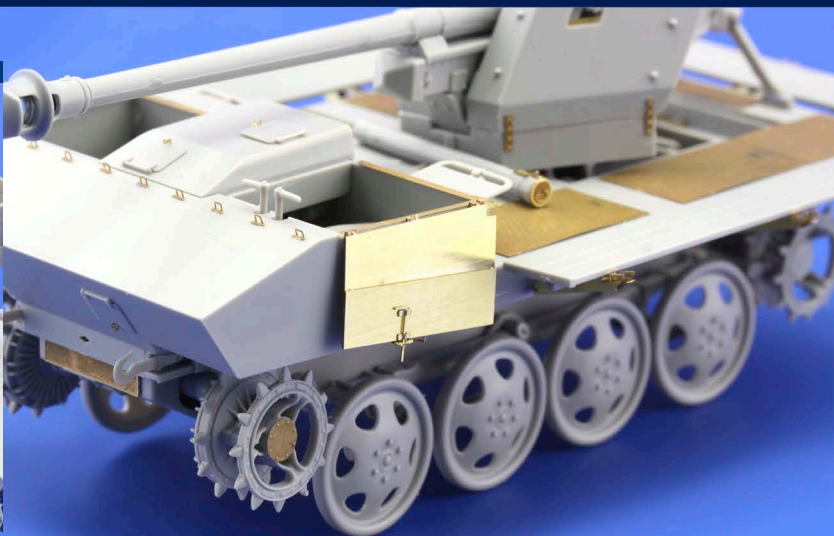
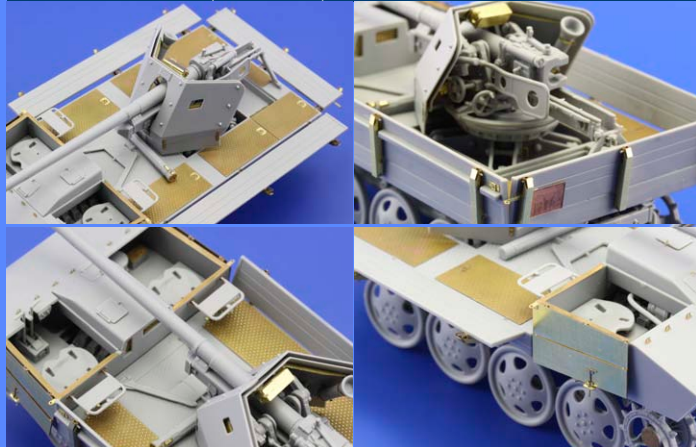
32730 A-4E exterior 1/32 Trumpeter



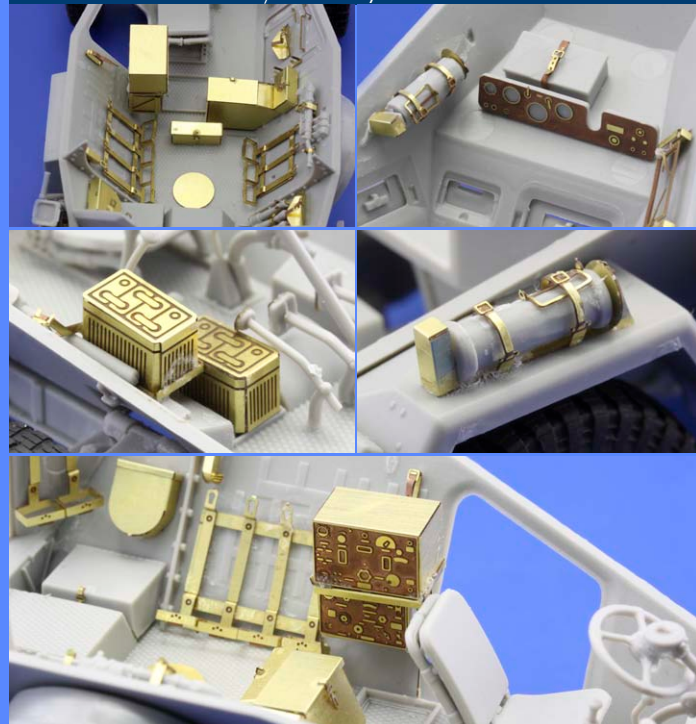
For whole actual
Photo-Etched sets
production see page 18.

PHOTO-ETCHED SETS

36171 RSO Pak 40/4 75mm 1/35 Dragon

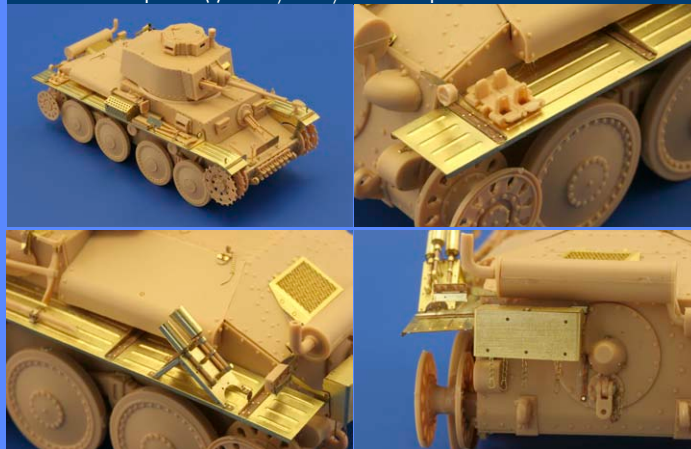


36189 Sd.Kfz.223 LPF 1/35 Hobby Boss



RSO Pak 40/4 75 mm

36192 Pz.Kpfw.38(t) Ausf.E/F 1/35 Trumpeter



36197 fauna - water animals/fish - colour 1/35

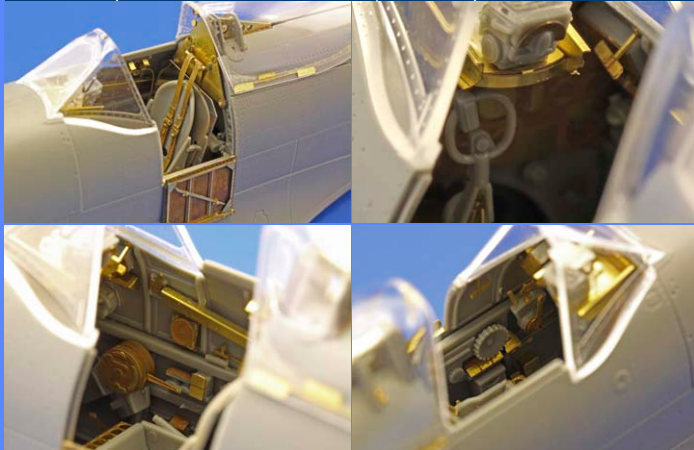


36198 fauna - small animals - colour 1/35



PHOTO-ETCHED SETS

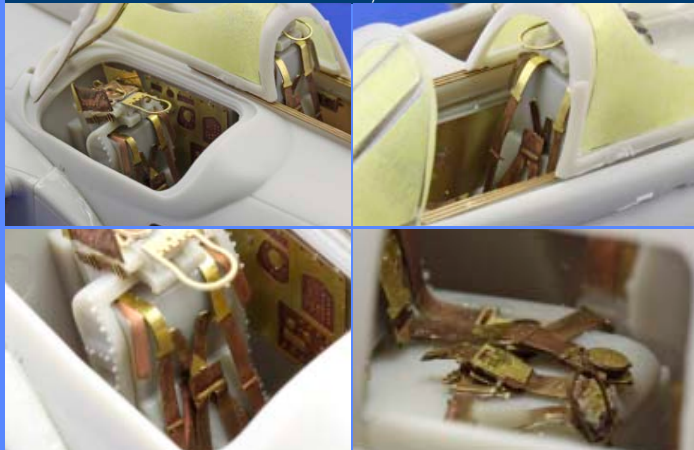
32711 Spitfire Mk.XVIe interior S.A. 1/32 Tamiya



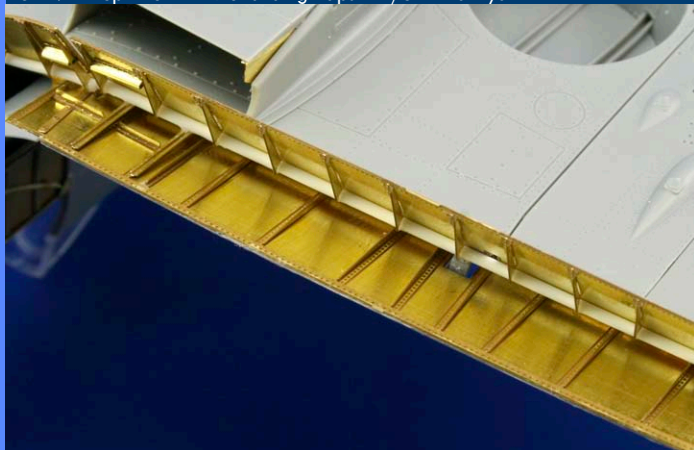
32722 Spitfire Mk.XVIe seatbelts 1/32 Tamiya



49589 Sea Vixen FAW.2 seatbelts 1/48 Airfix



32292 Spitfire Mk.XVIe landing flaps 1/32 Tamiya



AIRCRAFT 1/48

The main December star in this scale is the Sea Vixen. It is a very interesting plane, so also our PE sets for it would be not conventional. Also in this case there will be one set released during the next year. Don't worry – this means January. Also to be released is a set for the Fw 189A-1 and is related to the previous three sets released in November. Otherwise the Ju 88G-6 is covered by two complete sets this month. The Junkers is an older kit, but there are still many requests for new sets. So you can see that patience is sometimes rewarded and sometime brings an interesting result. In 1/48 scale there is one more set for an older kit, in this case the A-4N by Hasegawa. At finally I can't overlook a set mystically called Static discharge wicks. They are the small tubes with a wire, currently mounted on trailing edges on almost every plane, including vintage warbirds. Recently I have seen them on a flying B-17. I am sure, that this set will be very useful and so will be a very good seller. Something like Remove Before Flight, that were once subjects

of large discussions about their practicability... paper and decal based versus PE ones. After a few years it is not possible to see the paper or decal made RBF, but the pre-printed photo-etched sets are a huge sellers.

73400 Spitfire Mk.I/Mk.IIa S.A. 1/72 Airfix



For whole actual
Photo-Etched sets
production see page 18.

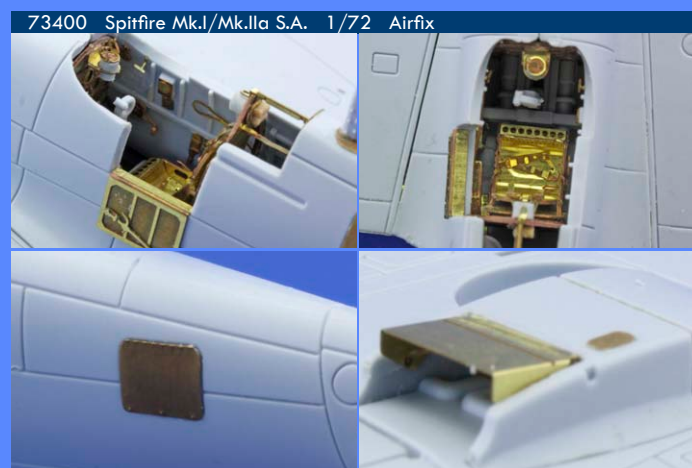
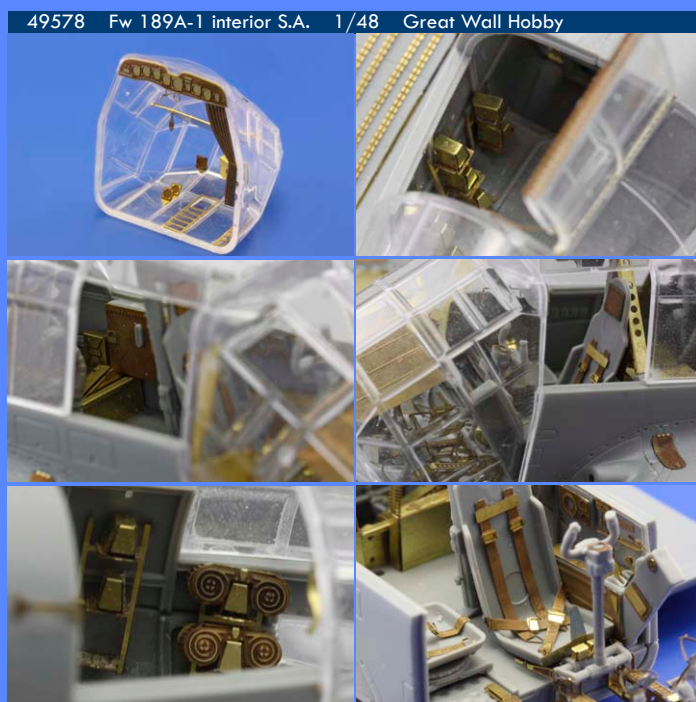
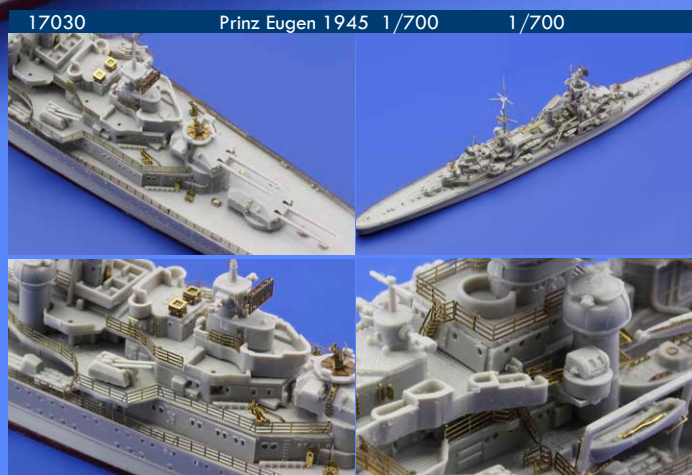
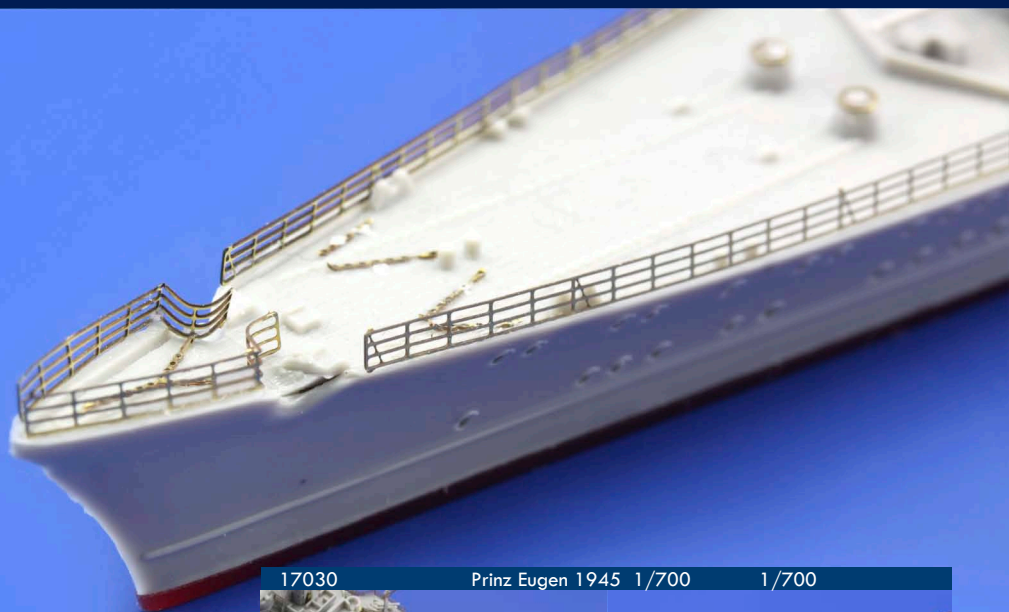
PHOTO-ETCHED SETS

AIRCRAFT AGAIN, 1/72. SIMPLY I LOVE AIRCRAFTS!

Especially in 1/72 scale. And especially when we will mold a fourth batch of our little Hellcat. This of course doesn't keep us from releasing PE accessories for a competitor produced by another manufacturer, as you may see below. What if Dragon would sell this kit as well as we are selling our own Hellcat? Therefore you may see as part of the December news two sets – exterior and interior for the F6F-5 by Cyberhobby, which is a code name for Dragon, if I understand it correctly. If you read the news list carefully, in the Zoom range, you will see a set for our own Weekend or Overtrees Hellcat. Although it is a good rule to tolerate your competitors, there is a limit. While one more set is related to Cyberhobby's Meteor Mk.I, the last mentioned 1/72 scale set is the Airfix Spitfire Mk.I/Mk.II. Airfix has increased their 1/72 scale production, so we will cover them with our photo-etched sets. What else would you expect from us?

FINALLY SHIPS

The news list shows three sets in two scales, each of which has various accessories. Also there is a set for the Prinz Eugen, dated 1945, in 1/700 scale.



AT LAST WHAT WAS OMITTED

Zoom sets were only partially mentioned in the 1/72 section. This edition is not described in as much detail, due to its relation to larger sister sets. There is a similar situation with the BIG ED sets. This month there are again four BIG ED sets, with a set for our own MiG-21MF as set number one. As was said previously, there will never be enough MiGs!

BIG ED



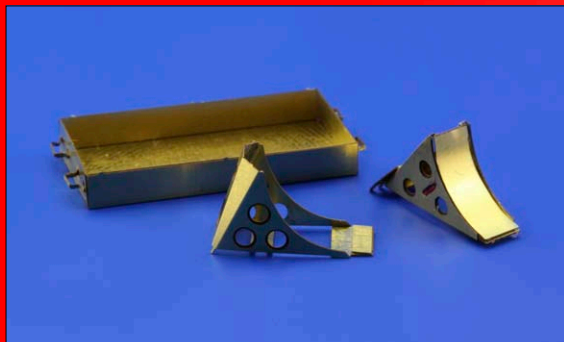
32701 Bf 109E-4 interior S.A. (BIG3307)



32282 Bf 109E-4 exterior (BIG3307)



48703 MiG-21MF accessories (BIG4960)



48703 MiG-21MF accessories (BIG4960)

BIG3306 F-16i SUFA 1/32 ACADEMY

BIG3307 Bf 109E-4 1/32 DRA/CYB

BIG4960 MiG-21MF LATE 1/48 EDUARD

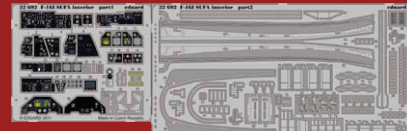
BIG4961 F-4N 1/48 HASEGAWA

BIG3306 F-16i SUFA 1/32 ACADEMY

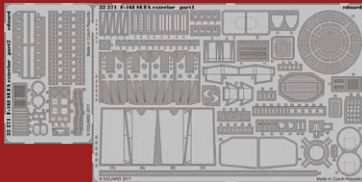
32149 F-16 ladder



32692 F-16i SUFA interior S.A.



32271 F-16i SUFA exterior



32690 Remove Before Flight - Israel



32685 F-16i SUFA seatbelts



32702 F-16i SUFA undercarriage



JX114 F-16i SUFA



BIG3307 Bf 109E-4 1/32 DRA/CYB

32282 Bf 109E-4 exterior



32701 Bf 109E-4 interior S.A.

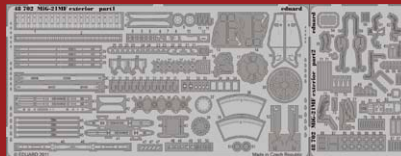


JX124 Bf 109E-4

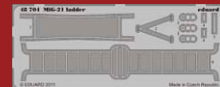


BIG4960 MiG-21MF LATE 1/48 EDUARD

48702 MiG-21MF exterior



48704 MiG-21 ladder



49571 MiG-21MF late interior S.A.



EX337 MiG-21MF 1/48 Weekend



48703 MiG-21MF accessories



BIG4961 F-4N 1/48 HASEGAWA

49541 F-4N S.A.



49009 Remove Before Flight



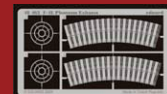
EX004 F-4



48434 F-4 F.O.D.



48462 F-4 exhaust



49014 F-4 ejection seat



December looks to be a completely Russian month for Brassin. There are two sets for the MiG-29 by Academy and a set with R-27R rockets. All of them are in 1/48 scale, which is the most popular scale for our Brassins. The seat for the MiG-29 was already released as part of our limited edition kit. The exhaust nozzles are completely new. When Academy re-released this kit, it was the perfect model to add some more detail... especially for the experts.



648042

MiG-29 seat early
1/48 Academy

1/48

BUY MiG-29 seat early



648043

R-27R/R1 / AA-10 Alamo-A
1/48



BUY R-27R/R1 / AA-10 Alamo-A



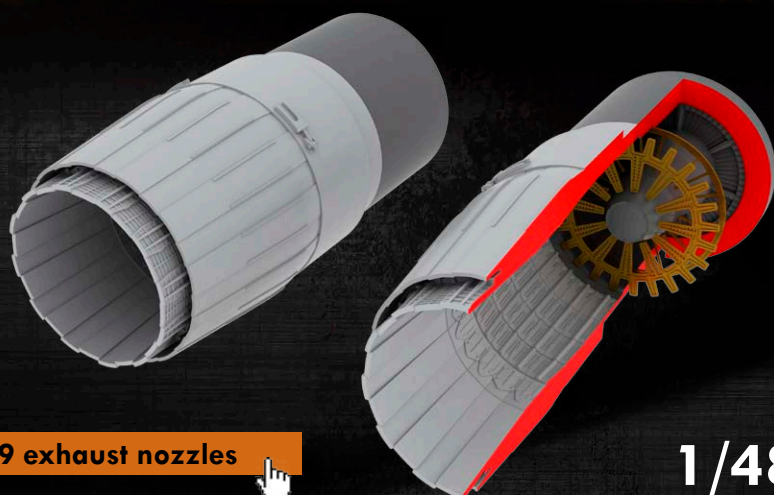
1/48

648044

MiG-29 exhaust nozzles
1/48 Academy/Eduard



BUY MiG-29 exhaust nozzles



1/48

eduard

KITS

8232	MiG-21BIS	1/48	ProfiPACK
1164	Bf 110C/E in MTO	1/48	Limited Edition
7414	F6F-3 HELLCAT	1/72	Weekend

PE-SETS

17030	Prinz Eugen 1945	1/700	Trumpeter
32278	Su-25 Frogfoot exterior	1/32	Trumpeter
32292	Spitfire Mk.XVIe landing flaps	1/32	Tamiya
32295	Harrier GR.Mk.7 exterior	1/32	Trumpeter
32711	Spitfire Mk.XVIe interior S.A.	1/32	Tamiya
32716	Harrier GR.Mk.7 seatbelts	1/32	Trumpeter
32717	Harrier GR.Mk.7 interior S.A.	1/32	Trumpeter
32719	A-4E interior S.A.	1/32	Trumpeter
32722	Spitfire Mk.XVIe seatbelts	1/32	Tamiya
32724	A-4E Escapac IA-1 seatbelts	1/32	Trumpeter
32730	A-4E exterior	1/32	Trumpeter
36171	RSO Pak 40/4 75mm	1/35	Dragon
36189	Sd.Kfz.223 LPF	1/35	Hobby Boss
36192	Pz.Kpfw.38(t) Ausf.E/F	1/35	Trumpeter
36197	fauna - water animals/fish - colour	1/35	
36198	fauna - small animals - colour	1/35	
48682	Ju 88G-6 exterior	1/48	Dragon
49515	Static Discharge Wicks	1/48	
49545	Ju 88G-6 interior S.A.	1/48	Dragon
49573	Sea Vixen FAW.2 S.A.	1/48	Airfix
49578	Fw 189A-1 interior S.A.	1/48	Great Wall Hobby
49579	A-4N S.A.	1/48	Hasegawa
49589	Sea Vixen FAW.2 seatbelts	1/48	Airfix
72525	F6F exterior	1/72	Cyber Hobby
73400	Spitfire Mk.I/Mk.IIa S.A.	1/72	Airfix
73401	Meteor F.1 S.A.	1/72	Dragon/Cyber Hobby

73404	F6F-5 interior S.A.	1/72	Dragon/Cyber Hobby
99034	Railings 3 bar with mesh	1/350	
99043	IJN cable reel	1/700	
99057	WWII German doors and windows	1/350	

ZOOMS

33093	Spitfire Mk.XVIe interior S.A.	1/32	Tamiya
33095	A-4E interior S.A.	1/32	Trumpeter
33096	Harrier GR.Mk.7 interior S.A.	1/32	Trumpeter
FE545	Ju 88G-6 interior S.A.	1/48	Dragon
FE573	Sea Vixen FAW.2 interior S.A.	1/48	Airfix
FE578	Fw 189A-1 interior S.A.	1/48	Great Wall Hobby
FE579	A-4N S.A.	1/48	Hasegawa
SS400	Spitfire Mk.I/Mk.IIa S.A.	1/72	Airfix
SS401	Meteor F.1 S.A.	1/73	Dragon/Cyber Hobby
SS413	F6F-5 interior S.A. Weekend	1/74	Eduard

MASKS

EX344	C-2	1/48	Kinetic
JX137	J2M3 Raiden	1/32	Hasegawa
XT178	Pz.Kpfw.38(t) Ausf.E/F wheels	1/35	Trumpeter

BIG-ED

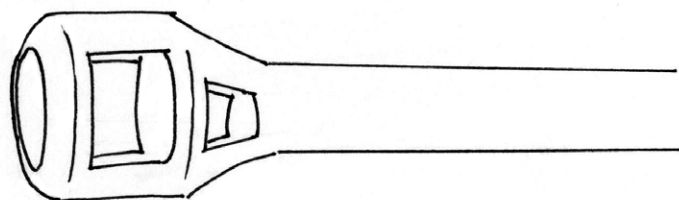
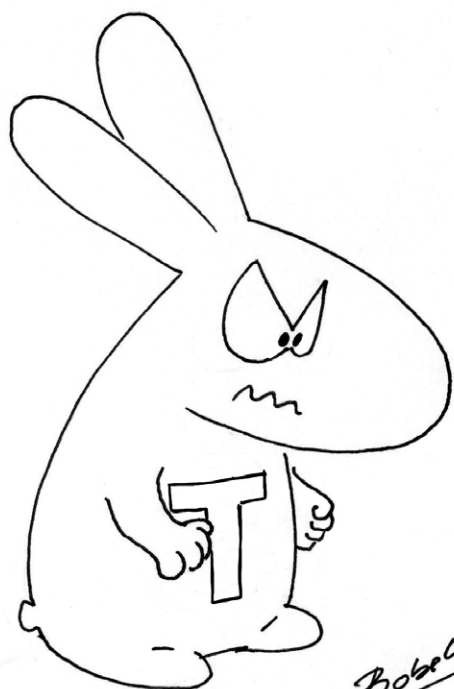
BIG3306	F-16I SUFA	1/32	Academy
BIG3307	Bf 109E-4	1/32	Dragon/Cyber Hobby
BIG4960	MiG-21MF	1/48	Eduard
BIG4961	F-4N	1/48	Hasegawa

BRASSIN

648042	MiG-29 seat early	1/48	Academy
648043	R-27R/R1 / AA-10 Alamo-A	1/48	
648044	MiG-29 exhaust nozzles	1/48	Academy/Eduard

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Comments and input from J&T



EDUARD WATER CREATURES FOR YOUR ~~AQUARIUM~~ DIORAMA



3D 36197 Fauna - water animals/fish color
36198 Fauna - small animals - color



MiG-21BIS á la Eduard

Martin Král

One of the kits that we are releasing this month is of the MiG-21BIS. Given that this specific variant is shrouded in some confusion with respect to development and its intended role, it is prudent to say a few words on the theme.

Towards the end of the sixties, the MiG design bureau embarked on a modification program of the design that subsequently was given the designation MiG-21BIS. It was an extension of the MiG-21SM, and as opposed to all previous members of the family, was optimized for air to air combat in tight maneuvering fights at low to medium altitudes.

The specifications issued would require the MiG-21BIS to undergo several structural changes that would separate it from its predecessors, the MiG-21SM and SMT. First and foremost, the uprated R-25-300 engine was installed, that could develop 9720kg of thrust. This was the final, and one could say ultimate, development of the R-11 that powered the first and second generation MiG-21s. Thanks to the more powerful engine, the climb rate rose to 225m/s as opposed to 120 to 130m/s in the SM powered by the R-13-300 and

140-150m/s with the F-13 powered by the R-11. Lower fuel consumption and additional fuel housed in the spine at least partially alleviated the greatest shortcoming of the type - inadequate range.

Poor experience with the MiG-21SMT, that housed additional fuel tanks in a greatly enlarged spine that carried with it drastic performance penalties, was used in the redesign of the spine on the MiG-21BIS. The spine was smaller, and in terms of dimensions and shape, was a compromise between the same feature in the SM and SMT. The fact that this approach was successful is illustrated by its retrofit to earlier SMT airframes.

One of the final modifications was the substitution of titanium for formerly steel components. This was expected to lighten the aircraft and increase allowable limits which were increased from +7g to +8.5g. The radar was improved to RP-22M Safir ('Jay Bird') standard with a scan range of 30km and an attack range of 15km with partial capability of identifying targets against ground clutter. The radar was installed in the intake shock cone. The armament consisted of UB-32A

rocket pods and air-to-air R-13M and R-60 missiles.

Official integration of the type into the Soviet VVS came in February, 1971. That same year, flight testing of the Ye-7BIS was conducted. Series production of the MiG-21BIS ran from 1972 to 1985 at Factory No. 21 in Gorky. A total of 2,013 units left this plant, and it was the final production version of the type, which was made for the Soviet PVO and VVS, and was also exported.

Photo at the top: MiG-21BIS-D, Croatia Air Force, 2009 (photo: Ondrej Maliniak)



Interesting shot from the Cold War era – exchange visit of Soviet BISes in Finland. This unique event was later exceeded by delivery of BISes for Finnish Air Force. BIS was not first MiG-21 variant in Finnish Air Force. Fishbeds served in Finland for more than 35 years.

Izdeliye 75 - This was a version primarily built for the needs of the Soviet PVO and VVS. This is a somewhat clouded version, as there were two differing types built under this designation. This consisted of one type optimized for the PVO and equipped with the 'Lazur' that was fed with intercept inputs from ground based radar stations. The other was equipped with the 'Polyot-OI' ILS (Instrument Landing System) and supplied to the VVS. The systems were incompatible, and so only one or the other could be installed.

Izdeliye 75A - This was an export version equipped with the 'Lazur' system and a slightly modified avionics fit. It was in service with some former Warsaw Pact members (Bulgaria, East Germany and Poland).

Izdeliye 75B - This was an export version equipped with the 'Polyot-OI' ILS system, and was in use with other Warsaw Pact nations and some Third World countries. Among some users, this version was given the unofficial designation MiG-21BIS-SAU.

Another 301 MiG-21BIS aircraft to Izdeliye 75B standard were built in India by HAL from 1980 to 1987 under license. The seventy-five of these were assembled from components supplied directly from the Soviet Union in 1977. These aircraft received IAF specific navigation and communication equipment during assembly.



Modernized MiG-21BIS of Indian Air Force



Bulgarian MiG-21BIS

MODELING NOTES:

The aircraft at first glance appears very similar to its predecessors based on the SM. A closer look reveals several differences that are noteworthy. For the sake of clarity, I will proceed from the nose to the tail.

1. Air Intake

- aircraft equipped with the 'Polyot-OI' ILS system have a characteristic 'trident' type antenna under the nose and at the top of the vertical tail.

- the intake on the BIS is of a larger diameter than on aircraft powered by the R-11 and R-13.

2. Cannon

- there are two variants of the GSh-23 vents that vary the shape and number of ribs.

3. Cockpit

- the KM-1M seat can be either black or grey. Here, I would recommend checking your refer-

ences for specific aircraft, if possible.

- If the aircraft is wired to carry a jamming pod or tactical nuclear weapons, there should be a small control panel located below the top section of the windscreen.

4. Landing Gear

- the main gear is equipped with KT-92D wheels. These were unspoked.

5. Wing

- the upper wing lacks the oval panel characteristic of the SM, M and MF.

6. Armament

- the armament can be combined almost at will, as long as several rules are followed:

- a. maximum loadout not to exceed 1300kg!!
- b. loadouts must be symmetrical
- c. UB-32 pods can only be carried on the inboard stations and must have a half-moon cutout to clear the main landing gear cover.

- d. APU-60-2M dual R-60M rails can only be mounted on the outboard stations

- e. bombs of 500kg weight, as with MBD2-67U for four 50-100kg size, can only be carried on the inboard pylons.

- f. the aircraft can simultaneously carry air-air missiles with infrared guidance (R-13M, R-60M) and radar guidance (RS-2US, R-3R).



Cuban MiG-21BIS



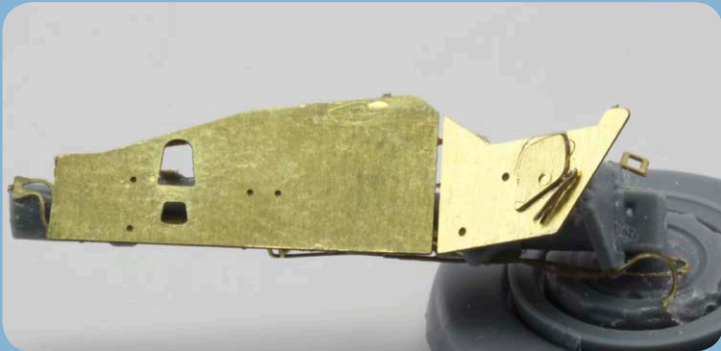
... Yugoslav

BUY MiG-21BIS 1/48



PHOTO-ETCHED SETS

MiG-21BIS

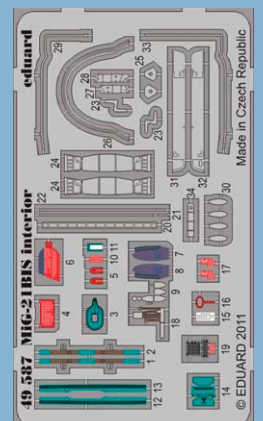
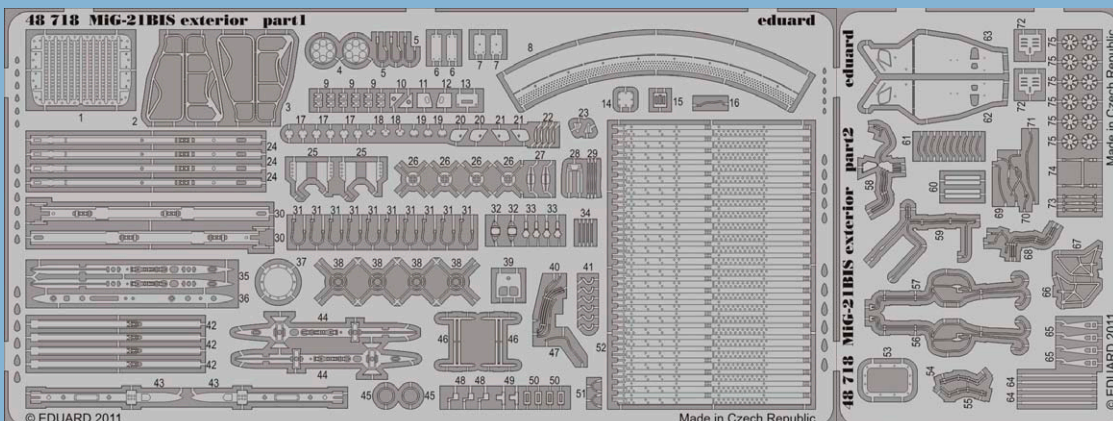


SOON!

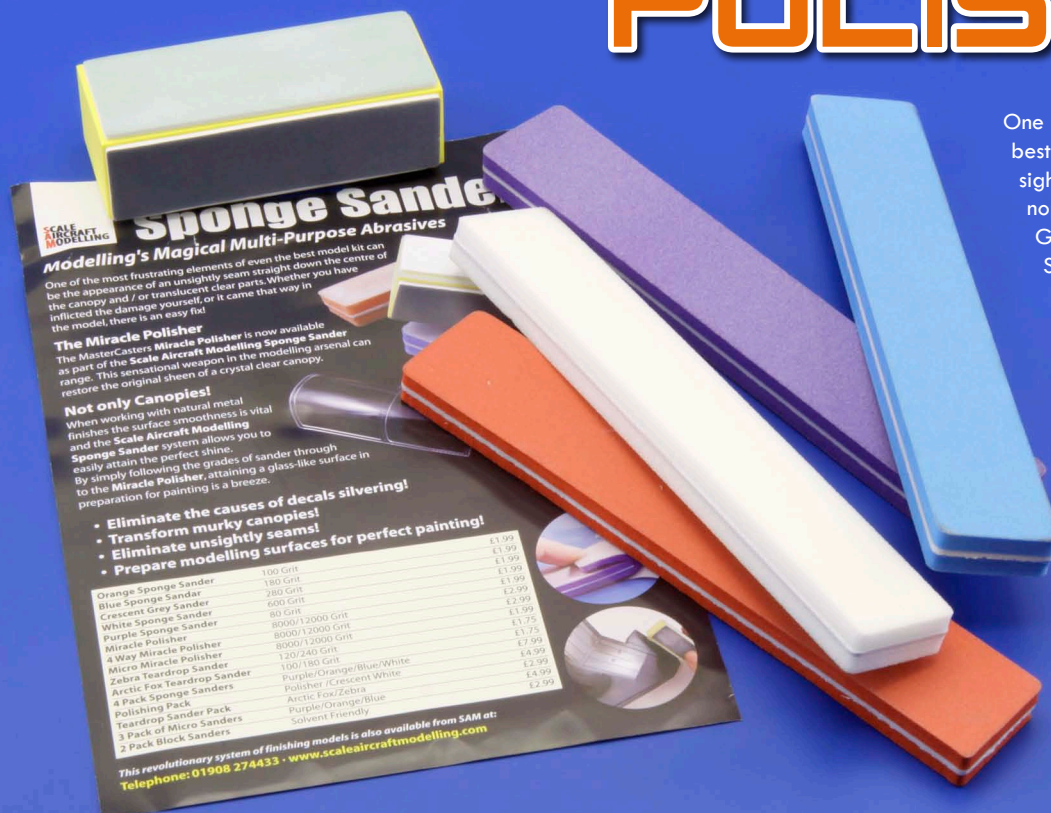
JANUARY 2012

48718 MiG-21BIS exterior

49587 MiG-21BIS interior



POLISHERS



One of the most frustrating elements of even the best model kit can be the appearance of an unsightly seam straight down the centre of the canopy and other translucent clear parts.

Great help on that way might be the new Sponge Sanders from Scale Aircraft Modelling magazine (including ex MasterCasters Miracle Polisher). Having opportunity to check some of them can say, this is really useful and easy way how to polish your canopies and other parts. Wide scale of grit size will help you to correct even hard looking scratch.

Highly recommended!
Jan Zdiarský



Exclusively available at: www.scaleaircraftmodelling.com

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Sellout

Last units



MiG-29UB 1/48

Cat.no.: 1162

In stock: Yes

Description: Scale

plastic kit



MiG-21MFN 1/144

Cat.no.: 7106

In stock: Yes

Description: Scale plastic kit



MiG-21MF in Czechoslovak service 1/48

Cat.no.: 1158

In stock: Yes

Description: Scale plastic kit



Me 262A Schwalbe DUAL COMBO 1/144

Cat.no.: 4420

In stock: Yes

Description: Scale plastic kit

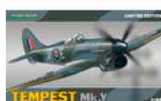


Fw 190A-5 1/48

Cat.no.: 8174

In stock: Yes

Description: Scale plastic kit

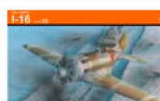


TEMPEST Mk. V 1/48

Cat.no.: 1169

In stock: Yes

Description: Scale plastic kit



I-16 Type 29 1/48

Cat.no.: 8152

In stock: Yes

Description: Scale plastic kit



P-400 1/48

Cat.no.: 8471

In stock: Yes

Description: Scale plastic kit



Fokker Eindecker / DIE ERSTE KANNONEN DUAL COMBO 1/48

Cat.no.: 1141

In stock: Yes



Fokker D. VII Mág - DUAL COMBO 1/48

Cat.no.: 1147

In stock: Yes

Description: Scale plastic kit



Avia B-534 in Slovak WWII service 1/48

Cat.no.: 1146

In stock: Yes

Description: Scale

plastic kit



Pfalz D. IIIa DUAL COMBO 1/48

Cat.no.: 8047

In stock: Yes

Description: Scale

plastic kit

LYSANDER Mk.III

1/48 ProfiPACK Cat.No. 8083

BUILT



Lysander Mk.III SCW, V9287,
No. 161 (SD) Squadron, RAF,
airbase Tempsford, 1942

Built by Greg Goheen



7078
Hellcat MkI/Mk.II
Dual Combo!
1/72 ProfiPACK

4426
MiG-21SMT
Dual Combo!
1/144 SUPER44

84163
P-39N Airacobra
1/48 Weekend

1167
Su-27
1/48 LIMITED EDITION

BIG ED

JANUARY 2011

- BIG3308 AV-8B 1/32 Trumpeter
- BIG4962 MIRAGE 2000N 1/48 Kinetic
- BIG7272 Mi-24V HIND E 1/72 Zvezda
- BIG5310 USS GEARING DD-710 (1945) 1/350 Dragon

eduard BRASSIN

JANUARY 2011

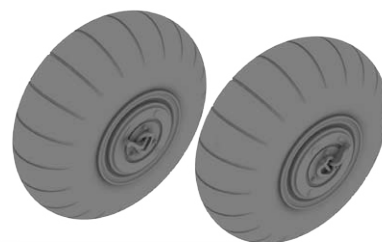
- 648047**
IAB-500 imitation atomic bomb
1/48
One atomic bomb, although it's training dummy used on MiG-21s.
- 648052**
Bf 110 C/D main undercarriage wheels
1/48
- 648045 FEBRUARY 2011**
RS-2US / AA-1 Alkali service cart
1/48
RS-2US with a service cart



648045
JANUARY 2011



648047



648052

PHOTO-ETCHED SETS

JANUARY 2011

PE-SETS

17029	USS Nimitz CVN-68	1/700	Trumpeter
32284	P-40M gun bay	1/32	Hasegawa
32285	P-40M landing flaps	1/32	Hasegawa
32287	Spitfire Mk.XVIe exterior	1/32	Tamiya
32304	A-4E landing flaps	1/32	Trumpeter
32305	A-4E slats	1/32	Trumpeter
32704	P-40M interior S.A.	1/32	Hasegawa
36196	fauna - birds colour	1/35	
36200	Defender 110 hardtop	1/35	Hobby Boss
36204	Grapevine/vinná réva (white) colour	1/35	
48707	Sea Vixen FAW.2 ladder	1/48	Airfix
48717	Spitfire Mk.XII landing flaps	1/48	Airfix
48718	MiG-21BIS exterior	1/48	Eduard
48725	P-61A undercarriage	1/48	Great Wall Hobby
49580	Me 262A-1 S.A.	1/48	Hobby Boss
49586	Spitfire Mk.XII S.A.	1/48	Airfix

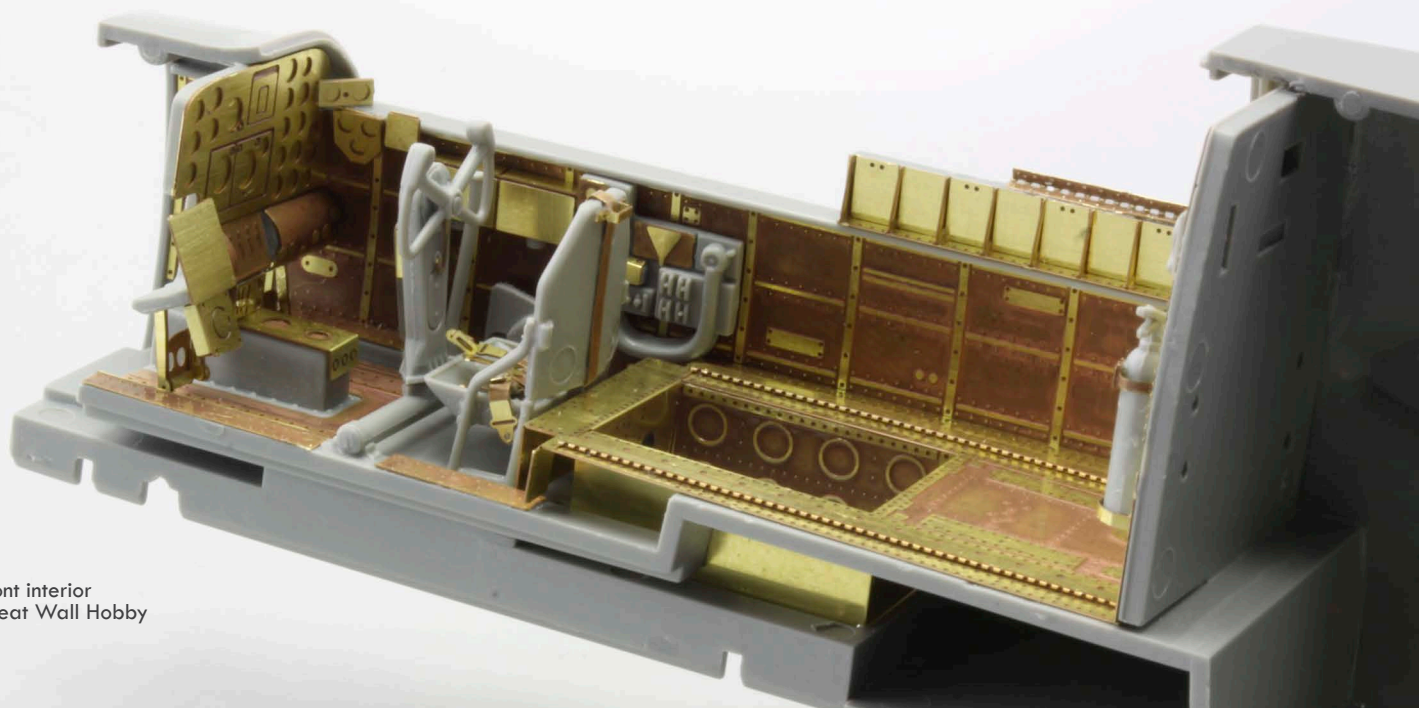
49587	MiG-21BIS interior S.A.
49590	P-61A front interior S.A.
49595	P-61A rear interior S.A.
73398	F9F-2 S.A.
99030	Railings 45' 3 bars long
99038	USN ladders
99051	IJN ship windows

1/48	Eduard
1/48	Great Wall Hobby
1/48	Great Wall Hobby
1/72	Hobby Boss
1/350	
1/700	
1/350	

ZOOMS

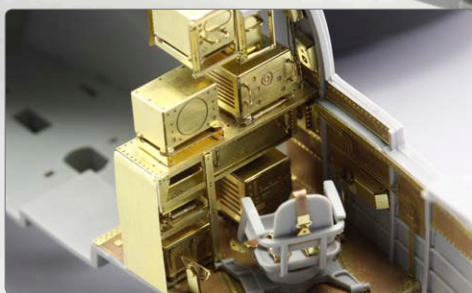
33090	P-40M interior S.A.	1/32
FE580	Me 262A-1 S.A.	
FE586	Spitfire Mk.XII interior S.A.	
FE587	MiG-21BIS interior S.A.	
FE590	P-61A interior S.A.	
SS398	F9F-2 S.A.	

1/32	Hasegawa
1/48	Hobby Boss
1/48	Airfix
1/48	Eduard
1/48	Great Wall Hobby
1/72	Hobby Boss

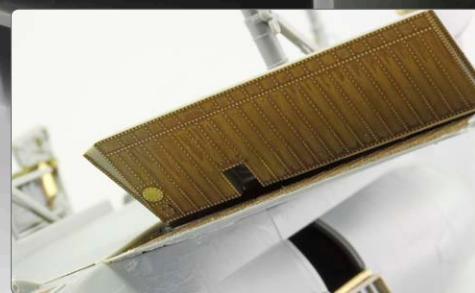


49590
P-61A Front interior
1/48 Great Wall Hobby

January should bring the last set for the Sea Vixen with a ladder, a set for our own MiG-21BIS. It comes a month after the kit release. Do you have a feeling that something new must happen at Eduard? We will be introducing the Black Widow collection. In January, we will be releasing the initial three sets. But that's not all. The Black Widow is a big bird, and definitely needs these sets! The internal construction of the kit is not very accurate and is hard to use as a basis for other details. The Black Widow project will be finished in February. The main hero on the February list is another set, the photo-etched set for the MiG-21MF in 1/144 scale. First of all, this set is very appealing, and secondly it is our premiere set in this scale. I must not forget another cute item for January – a set of 1/35 birds. If you have no idea, let us surprise you!



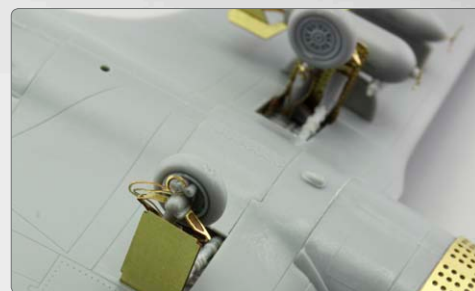
49595 P-61A rear interior S.A.
1/48 Great Wall Hobby



32304 A-4E landing flaps
1/32 Trumpeter



48717 Spitfire Mk.XII landing flaps
1/48 Airfix



73398 F9F-2 S.A.
1/72 Hobby Boss

Bf 109E-1

Cat.No. 8261 ProfiPACK

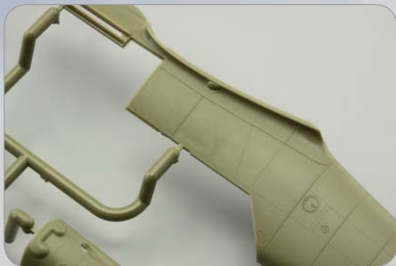
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1/48!

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