

ASIAN AIR ARMS NEWSLETTER 16

October/November 2019

Asian Air Arms website and Newsletters support
 "Asian Air Arms SIG", a Special Interest Group of IPMS (UK)

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42
 countries!



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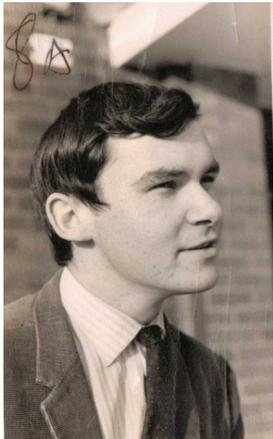
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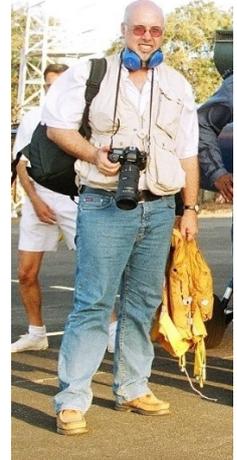


ASIAN AIR ARMS SIG & RESEARCH GROUP UPDATE



7

Sad to report that Phil Camp, our Indian Country Specialist has recently passed away. Phil was a true expert on all things Indian and made many trips there, in the process building up a wide network of Indian contacts. In conjunction with Simon Watson (of Aviation Bookshop) he photographed just about every military aircraft in the sub-continent. In his memory, this year, there will be a competition for the Phil Camp Trophy, and Simon has kindly agreed to award it to the winner. Phil was a true gentleman and of considerable help in moving the Asian Air Arms Research Group/SIG forward—we shall miss him.



2

The **BIG WEEKEND** will soon be on us! IPMS ScaleModelWorld will be held on Saturday and Sunday, the 9th and 10th of November. Our stand will be in Hall 1 (see next page) and you're very welcome to bring along your models for display. Depending on numbers, we may have to show some models on the Saturday and some on the Sunday. If you intend to display, please use the Table Labels that I've attached to the accompanying e-mail. Example here. →

Simple to use—just Save them in Word; Delete the info (except the Asian Air Arms title); substitute your own text; Save; then Print, preferably on thick paper or thin card.



COMPETITION NEWS: The official IPMS Awards ceremony will be on the Sunday morning but as we have plenty of prizes to dish out, we'll have an unofficial prize-giving (for the Class Winners, but not for our Best In Show which IPMS will announce on the Sunday). Our "private" award ceremony will be at our stand at 16.00 on the Saturday. Member and famous aviation author, Tom Cooper, will be giving out the Class prizes, and Simon Watson will award the Phil Camp Trophy.

3

Decal reviews tend to take up a lot of space in the Newsletter, yet they're invaluable! So in this issue I'm trying a different system. Go to the Decal Reviews page; click on the images and you'll be taken to the reviews themselves.

4

Gary Wenko has sent me this superb You Tube clip of JASDF F-4s. Gary says that it's a promo for the new Tom Cruise film "Top Gun—Maverick". Click on the image to watch it.



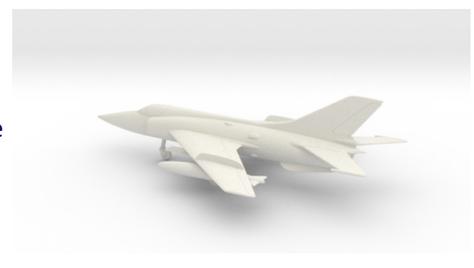
5

Andy Binks will be bringing to Telford his new F-104 book "Samurai Starfighters" so be sure to get a look at it—great images all round!



6

I've recently been asked about the "acceptability" of 3D printed models being displayed on our stand: those models that require no construction at all—just painting. Hmmm! Not kits are they? But are we going to see plenty more, as 3D modelling becomes progressively cheaper? Shapeways are currently offering a 1/72 Fantan @ £65.70 and a 1/72 Shenyang J-14 @ £ 207.23 (I kid you NOT!) Many "old school modellers", very much look down on them, but will ignoring them make them go away? I very much doubt it. Some things are here to stay whether we like it or not. So, what are your feelings regarding our welcoming or spurning them? Let me know your thoughts.

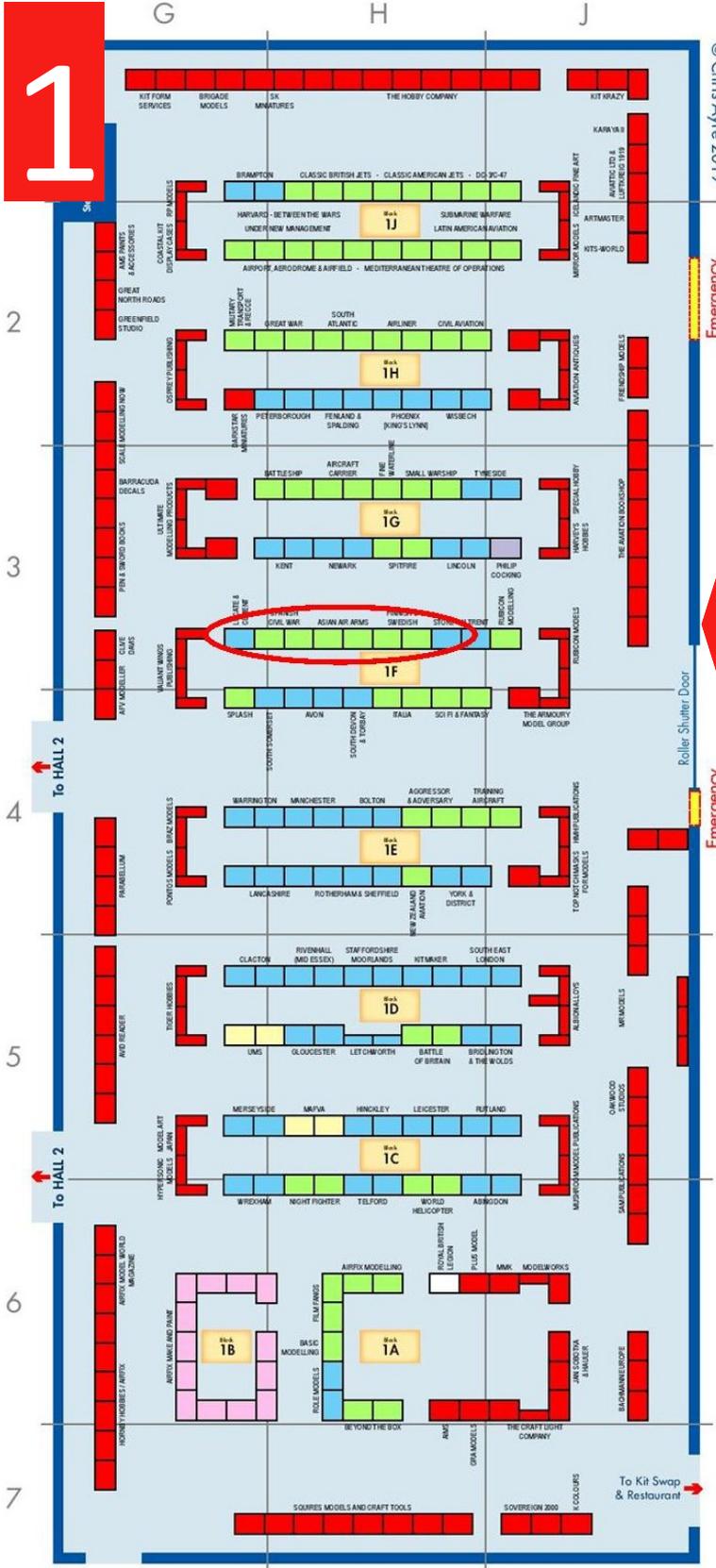




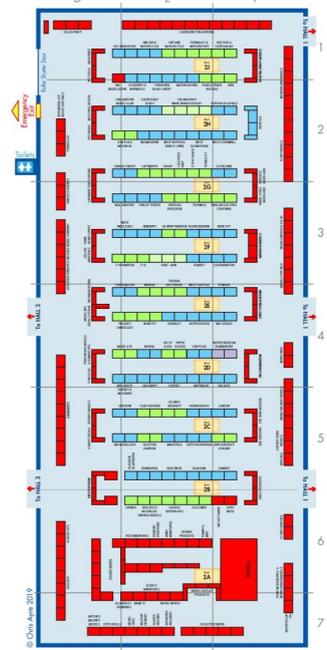
IPMS ScaleModelWorld 2019

We'll be in Hall 1, I've circled our location.

1



HALL 2



HALL 3 & FOYER



For information concerning traders and exhibitors please go to IPMS website. <https://ipmsuk.org/ipms-scale-modelworld/>



MITSUBISHI F-2 By Andy Binks (et al)



The Mitsubishi F-2 is a multi-role, single-engine fighter aircraft produced for the Japan Air Self Defense Force (JASDF). It was jointly developed in the mid- to late 1980s by Mitsubishi Heavy Industries and Lockheed Martin. Based on the design of the Lockheed Martin F-16 Fighting Falcon, the F-2 is capable of both air-to-air and air-to-surface roles though it is optimized for the latter, being capable of carrying multiple ASM-2 anti-ship missiles and GBU-38B JDAM bombs. Many of the aircraft's systems were developed in Japan and the F-2 was also the first production fighter to

be equipped with an Active Electronically Scanned Array (AESA) radar.

The F-2 has a wing area that is approximately 25% larger than that of the F-16 which allows for more internal fuel storage and two additional weapon pylons. In addition to the greater wing area, the F-2 fuselage and the horizontal tails are also larger.

Amid great controversy regarding both the programme cost and the wording of the deal between Japan and the USA, the design was initiated, with the first flight of an XF-2A occurring on 7 October 1995. The two-seat XF-2B followed on 17 April 1996. The first aircraft entered service in 2000 and a total of 98 airframes were produced, split 64/34 in favour of the single seat –A version.

The current force of JASDF F-2s equip 3, 6 and 8 squadrons on front line duty, 21 squadron for fast jet training and the Air Development Test Wing utilising the four prototype aircraft.

The ambitious goal of developing a fighter that used so many new technologies exacted a price, At a reported \$108 million per plane in 2004 dollars, the F-2 is as expensive as the F-15s it seeks to supplement. Unfortunately, its overall performance, smaller radar size and single engine make it a less capable aircraft. As a result, a program originally intended to field 130 fighters ceased production at 94. At least 18 F-2s were damaged in the 2011 tsunami, leaving a reduced fleet. Japan is also moving to try and rehabilitate and upgrade up to 13 of the 18 damaged planes. Upgraded F-2s will continue flying alongside Japan's F-15Js, and Japan's next-generation F-35A fighters. With the JASDF's F-4J and RF-4J Kai(zen) Phantom IIs slated for retirement.

Source: Andy Binks & Defense Industry Daily



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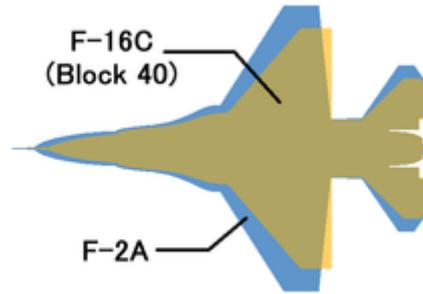
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MITSUBISHI F-2 by Andy Binks (et al)

SOME DIFFERENCES IN THE F-2 FROM THE SIMILAR F-16A

- a 25% larger wing area
 - composite materials used to reduce overall weight and radar signature
 - longer and wider nose to accommodate a J/APG-1/J/APG-2 active electronically scanned array (AESA) radar. The F-2 was the first operational military aircraft in the world to feature an AESA radar, before the F-22 Raptor's AN/APG-77 AESA radar.
 - larger tailplane
 - larger air intake
 - three-piece cockpit canopy
 - capabilities for four ASM-1 or ASM-2 anti-ship missiles, four AAMs, and additional fuel tanks
- Also, the F-2 is equipped with a drogue parachute, like the version of the F-16 used by Korea, Netherlands, Norway, Greece, Turkey, Indonesia, Taiwan, and Venezuela.



MODELLING THE MITSUBISHI F-2

The only mainstream 1/72 and 1/48 scale kits available are from Hasegawa, both of which are excellent quality. As well as the kits decals, aftermarket sheets are available from Platz, Afterburner and DXM, the latter being the easiest to obtain. For many years the paint colours had to be hand-mixed but they are now available from both MRP Paint and the Mr Color ranges.

1/72



1/48



**WISH YOU
COULD GET A
REALLY BIG
F-2?**

Click [HERE](#) to read member Meindert de Freeze's amazing 1/32 conversion of an F-16 into an F-2.

Guideline Publications

NEW MEMBERS

We welcome the following 23 new members: Phillip Koh, Raymond Tiau, B Lim and Beck Chai Moh from Singapore; Dick Lohuis and Henk Schakelaar from the Netherlands; Redwan Rahmat and Zeeshan from Bangladesh; Mike Charlton from France; Luca Brusati from Italy; Simon Jennings from Ireland; Dave Lourenco-Evans, Waqas Ahmad, Terence Wong-Lane, Chris Miller and Ray Dunn from the UK; Kitti Tatsumaki from Malaysia; Naeem Abbas, Khalid Zia Saleem and Sharjeel Ahmad from Pakistan; Carlo Guzzo and Rod Thorsen from USA; and Bjorn Jacobsen from Norway. We now have 310 members from 42 countries.

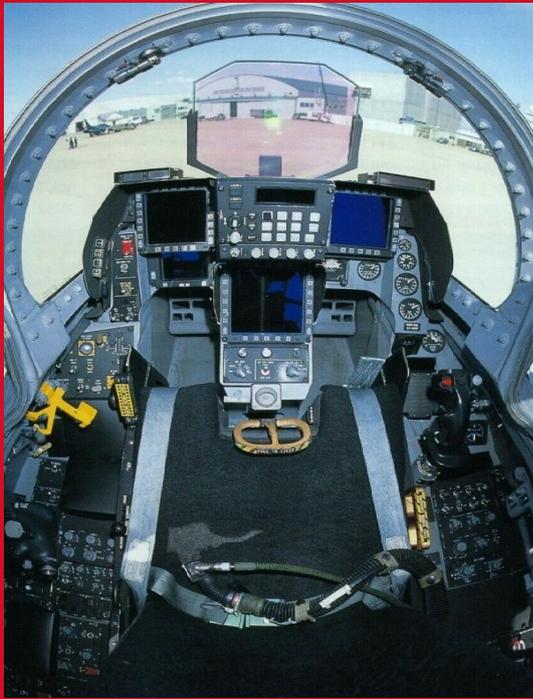


MITSUBISHI F-2 MEDLEY





MITSUBISHI F-2 IN THE DRIVING SEAT!





MITSUBISHI F-2 MAINTENANCE



Click image for a superb video of F-2 maintenance and flight.





MITSUBISHI F-2 PROFILES



8 Hikotai



3 Hikotai



3 Hikotai



6 Hikotai



3 Hikotai



6 Hikotai



3 Hikotai



6 Hikotai



21 Hikotai



6 Hikotai



21 Hikotai



3 Hikotai

All illustrations on this page by Anatoliy Ivaniv



Build a 1/32 Mitsubishi F-2 from an F-16



The Mitsubishi F-2 fighter from Japan always had my attention as an interesting aircraft with its F-16 resemblance and nice colours. In 1/32 a model would be a very nice companion to the F-16 models, and as I had been given a spare F-16C kit from **Revell** by my good modelling friend Peter and still had some spare parts from F-16 kits of Hasegawa, I started a conversion project.

The **Revell F-16** kit is quite basic but has an accurate shape for a F-16 model. The kit has been released in several variants, an F-16"A", "C" including such schemes as the greys, aggressor scheme, Tiger scheme etc. There is no engine intake ducting and the cockpit has no details, decals being supplied for the instrument panels. It has rubber wheels and the undercarriage bays are not too bad. You also get some stores, but only 1 centreline fuel tank. Stores like the Sidewinders are very basic.

This kit will be extensively be converted into a Japanese F-2 fighter. So let's make a start....

As a reference for the conversion I obtained the 1/72 kit of the F-2 of **Hasegawa number E15**. It is a state of the art kit for this scale and can be used a check up model for the larger 1/32 model based on the **Revell F-16** kit to be made.



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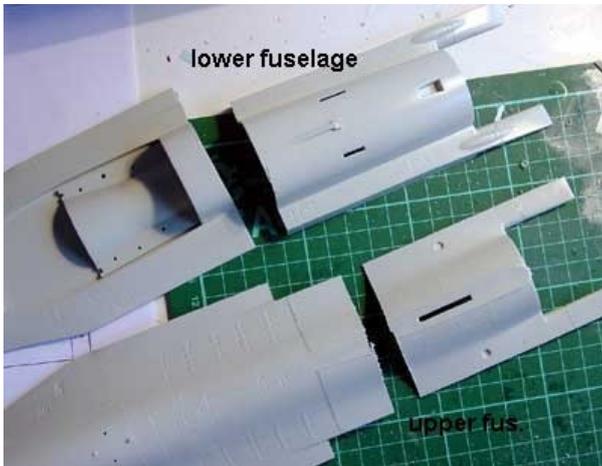
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Build a 1/32 Mitsubishi F-2 from an F-16

The F-2 fuselage has an extra frame in the rear fuselage.



A cut was made in the upper fuselage and at a more forward position in the lower fuselage to keep some strength in the to be assembled fuselage later on.

An insert was made of bended card, adding strength with longitudinal strips.

The extra fuselage length is here one frame, being 11 mm in 1/32 scale.

Below can be seen the added card for strength inside the rear fuselage.



Measuring the Hasegawa kit it was discovered that the F-2 has the smaller engine air intake, despite the GE-110 engine used. This is the same as the first F-16Cs that were delivered to the USAF at about the same period the F-2 project was started. This meant that the older style F-16 intake was needed. Although the Revell kit has the correct small intake, the kit gives you no intake ducting! One looks straight into the bare fuselage and nose wheel bay.



As I had a spare Hasegawa 1/32 intake (of the Hasegawa S27/ 08027 or use the S25/ 08025 kit), I decided to craft this intake onto the Revell kit. The result is seen here and it fits very well indeed with some cutting, sanding and filler.

[Click here to be taken to the FULL account of Meindert's amazing 1/32 F-2 conversion.](#)
NOT TO BE MISSED!

designer
Meindert de Vreeze

Aircraft Modelling In Plastic

[Click to visit Meindert's amazing website featuring hundreds of highly-detailed builds and conversions.](#)





ASIAN AIR ARMS DECAL REVIEWS

VEHA MAESTRO : F-5E/T
 SPECIAL MARKING 40th ANNIVERSARY
F-5E TIGER II ROYAL THAI AIR FORCE
 "LOW Vis"

 VMS0348002 DESIGN BY SUKASOM HIRANPHAN 1/48

ARMYCAST
 1/48
 F-5A/B
 T-33A
 F-5E/F

THE FREEDOM FIGHTERS
 F-4A, F-4B, F-4C, F-4D, F-4E & F-4F in the world

 1/48 decal set

THE SILVER STARS
 Lockheed T-33 in the world

 1/48 decal set

THE TIGERS
 F-5E & F-5T in the world

 1/48 decal set

ARMYCAST
 1/48
 F-86
 WORLD
 WIDE

THE SABRES
 F-86 Sabre & Canadian Sabre in the world

 1/48 decal set

FRONT-PENNY
 1/48
 CHINESE
 MiG-15,
 ROCAF
 F-104

CHANGE ALLEY

Gary Markham from South Korea is asking about the colours and markings of Royal Thai Navy AV-8As



Gary recently wrote to me and said "I received on Friday a new kit from Italeri of a AV-8A Harrier with Thai Navy decals. The paint and decal layout page is in colour. What got my attention on this aircraft is the paint colour scheme for the kit. I've seen the real aircraft in Thailand and its paint colours were that of the Spanish Armada (white and gloss light grey). The kit scheme is a much darker two tone and after looking at pictures on-line the pictures backed up the kit instructions. The kit decal sheet has black triangle warnings for the air intakes, in the pictures they show red or black." **Anyone care to inform us about RTN AV-8A colours?**

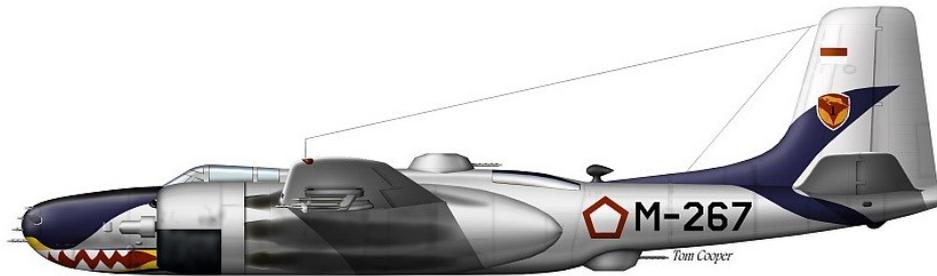
Gary's also looking for a photo of an RTAF AV-8A which he saw some years ago. He says "I remember it had the Spanish gold wings on the tail fin and the Thai flag, there were no mentions of Thai Navy." **Can anyone shine a light on this?**

Editor's (that's me!) Note: Whilst looking for photos for Gary I came across this shot of AV-8As on board HTMS Chakri Naruebet. It looks to me as if the wing is in two shades of grey—any opinions?





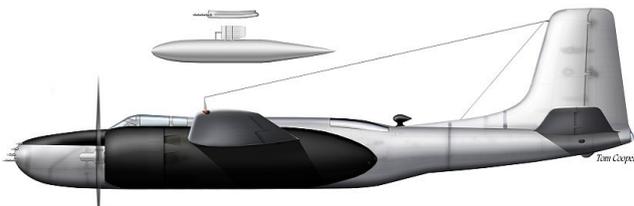
B-26 INVADER IN INDONESIA



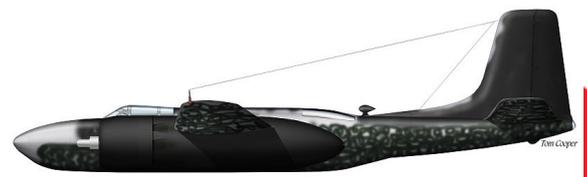
The Republic of Indonesia can claim the world's last fully armed use of Douglas' iconic Invader prior to 7th December 1977 when M-265 made its final flight to the Air Force Academy in Yogyakarta to be added to their museum collection.

The AURI was inspired to procure the Invader after witnessing their use by the CIA during Operation Haik in Sumatra in 1958. (For details of B-26 use during the clandestine Operation Haik click the images below.)

AUREV B-26B Batch 2



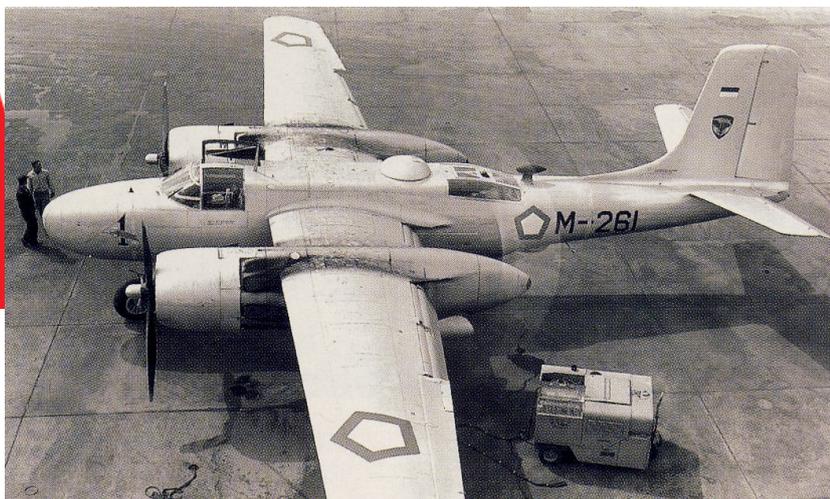
AUREV B-26C Batch 3



Eight B-26B's were to be acquired at an auction at Davis-Monthan AFB in the US, but only six were able to be funded as the final bids were above that anticipated. The airframes were serviced and delivered to Indonesia by Skyways Aircraft Servicing by mid-1960 and entered service with AURI 1 Skadron in Java displaying the badge of a deer on a shield. The aircraft supplemented the ex-Dutch B-25 Mitchells then in use and replaced the Tupolev Tu-2 "Bat" bomber that weren't popular with the crews.

They were used for tactical air support, interdiction and reconnaissance against rebel forces, and additionally for relief and evacuation duties. Invaders were also used during Operasi Trikora in January 1962 when Dutch forces were engaged during an amphibious assault on Irian Jaya (Netherlands New Guinea), the Dutch then relinquishing the area to Indonesia in May 1963.

The first loss of an AURI B-26 occurred in August 1962 when M-266 was lost in a storm with Captain Sutarno and his crew perishing.





B-26 INVADER IN INDONESIA (Part 2)



Skadron 1 was moved to Sarawak near the Malay border in September 1963 to support rebel operations opposed to the British reorganisation of Malaysia, Brunei and Singapore prior to independence. Although the RAF operated Hunters and Javelins in the area no records report any aerial confrontation other than the downing of an AURI C-130B by a Javelin. The conflict resulted in an arms embargo by the West on Indonesia and although they turned to the Eastern Bloc for support none was forthcoming, meaning the AURI had to rely on their aged propeller aircraft such as the B-26's, B-25's and P-51's. The conflict escalated in March 1964 when the Indonesians committed regular forces to the fighting where previously the combatants were "volunteers". This became known as the Malaysian Confrontation to the British and Operasi Dwikora to the Indonesians, but the bombers were not used until September 1965 when isolated missions were flown against minor targets.

After a coup in October 1965 by pro-communists and a counter coup by the Army in the following March the AURI returned to the counter insurgency role to clear up the remaining communist rebels and the Invaders were used in a number of operations against them until 1968.

When the AURI became the TNI-AU (Tentera Nasional Indonesia – Angkatan Udara) on 5th October 1971, with all Soviet support being withdrawn a few years previously, only the Invaders, Mitchells and Mustangs remained as operational combat aircraft, but Australian-built Sabres were added two years later. The piston engine bombers became difficult to maintain and the B-25's were withdrawn during 1974, but the Invaders continued on second-line duties after some had been cannibalised for spares. However in April 1975 the Chief of Air Staff ordered that three B-26's be returned to combat readiness to provide a modicum of strike capability. These airframes were M-264, M-265 and M-267, with the final operational flight taking place during Operasi Seroja in 1976, most either a patrol or escort mission. The type's last use was in spring 1977 in East Timor.

The Invaders were transferred to 3 Skadron on 29th July 1977, but rarely flown as there were only two qualified pilots, and finally withdrawn in the August after being replaced by Rockwell OV-10F Broncos.





B-26 INVADER IN INDONESIA (Part 3)



COLOURS AND MARKINGS

The Indonesian Invaders were operated in a natural metal scheme with a small black anti-dazzle panel in front of the cockpit, and black engine nacelles in order to hide the exhaust staining. During the late 1960's the remaining aircraft were decorated with dark blue noses and tail marks not unlike a shark's fin. They also had a red, white and yellow shark mouth added under the nose guns, with a nostril above and an eye below the canopy, with M-265 and M-267 being the only aircraft confirmed so far to have been so adorned. The iconic red and white pentagon was worn on both upper wings, left under wing and fuselage just behind the gunner's station, with the national flag on the fin. The legend AURI was carried under the right wing.

Most of the aircraft were delivered with the eight-gun nose (at least one machine was fitted with the later six-gun arrangement) plus both turrets were armed with 0.5 inch mgs, along with at least the inboard wing gun pack, and have been pictured armed with rockets and rocket pods.

AIRCRAFT

M-261 Not delivered (ex-N3489G*, although pictured fully marked up in AURI colours)

M-262 Reduced to spares, and scrapped

M-263 Apparently not delivered (but M-265 may have been displayed as M-263?)

M-264 Retired, and scrapped (although a displayed aircraft carried this serial at one stage)

M-265 Preserved at museum, made the last flight of an armed Invader

M-266 Lost in storm over Buru Island August 1962, crew lost

M-267 Retired, and scrapped 1977

M-268 Reduced to spares, and scrapped 1974

Their previous identities are unknown, all records having been lost.

*N3489G was built as a B-26C 43-22856 in the Tulsa plant in January 1945, c/n 18731





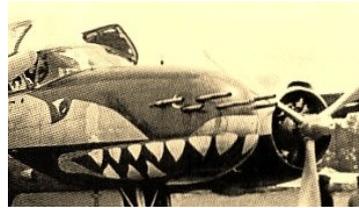
B-26 INVADER IN INDONESIA (Part 4)

Standard Armament

A-26B
(early)



Six .50-caliber machine guns



A-26B
(late)



Eight .50-caliber machine guns



MODELLING THE INVADER

The B-26 has been well served for modellers; in 72nd the ancient Airfix kit has been eclipsed by the Italeri/Revell offering and in 48th the very good Monogram/Revell/Hasegawa kit is still available. However, this too is likely to be surpassed by a new mould due any day now from ICM.

In decal form an AURI B-26 was covered by Albatross (M-265) in both 48th and 72nd scales, and the same aircraft by Dutch Decal in 72nd.

My thanks go to Hizkia Steven for his assistance in preparing this article, and the photos taken from sources in the public domain.

Mick Burton and Hizkia Steven

Give this a new nose and you're in business!

A-26C INVADER
A-26C インバーダー

1/144 scale, 3 parts, 2 sets.

A-26B Invader™
N. 1958 1:72

1/72 Italeri

Revell
LEVEL 4

1:48
173 PARTS
32.8 cm
44.5 cm

A superb 3 part video workshop.

A-26B INVADER

DUTCH DECALS 1/72 scalemates

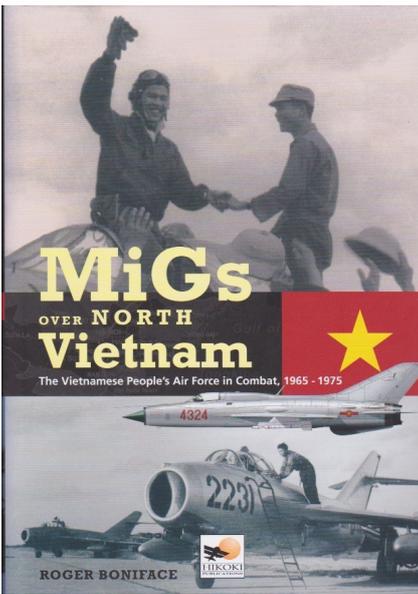
DECALSHEET SCHAAL/SCALE 1:72

72070: Aircraft of the AURI:
B-25 Mitchell, P-51D/K, C-47B, Piper L-4,
Auster, Catalina, B-26B Invader.

Producing decalsheets since 1980



“MiGs Over North Vietnam” by Roger Boniface

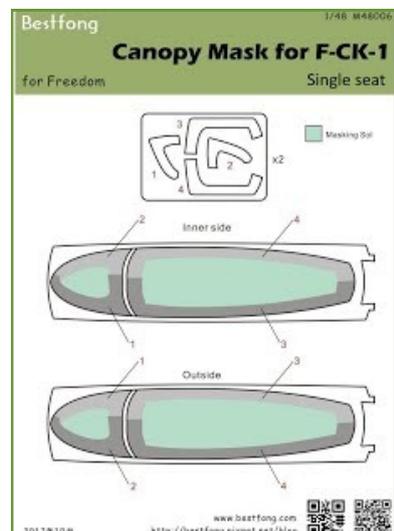
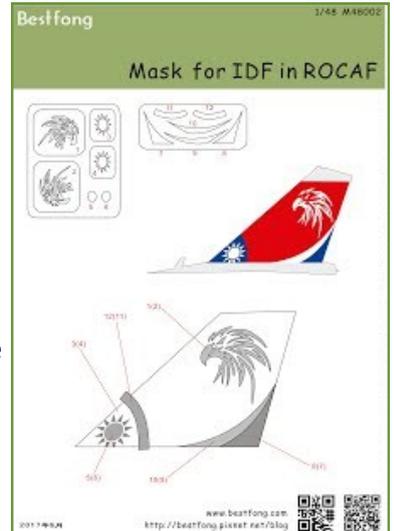
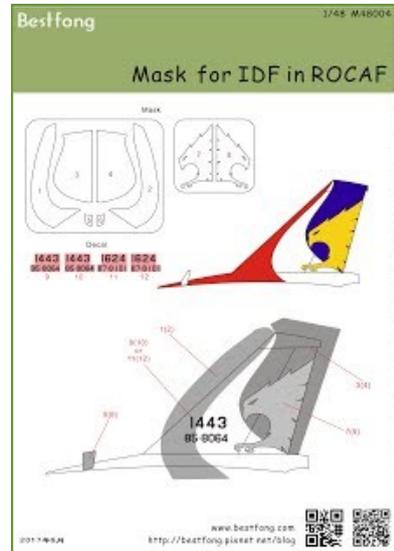


Roger Boniface is one of a unique band of aviation authors to have had direct access to study the history of jet combat during the Vietnam War, from the perspective of the Peoples' Republic of North Vietnam and their air arm, known as the Vietnamese Peoples' Air Force (VPAF). Since I had spent my formative years growing up in the Far East, where I developed a life-long interest in military aviation and in particular the Air Arms of Asia and the Commonwealth, my curiosity was piqued with the publication of Roger's potentially controversial 176-page book by Hikoki Publications and I duly purchased my copy of this attractively bound and illustrated tome. Initial impressions were very good, with over 150 colour and black & white photographs and some excellent colour side profiles to illustrate a very comprehensive and interesting

text, all rendered on very high quality paper as we have come to expect from Hikoki. As I delved deeper into the book though, one or two issues emerged which I am obliged to cover in order to provide a balanced review of content.

Roger introduces the subject with a short summary on the creation of the VPAF out of the political turmoil that surrounded the hasty departure of the French colonialists from Indo-China and the somewhat rudimentary training schemes that were established to train pilots and maintenance crews for the embryonic air force. The bulk of the book is then taken up with a detailed description of VPAF combat operations primarily between 1965 and the cessation of hostilities and re-unification of Vietnam in 1975, all lavishly illustrated with many interesting and previously unpublished photographs plus high quality colour side profiles. It's clear from the detailed text that Roger has expended considerable effort in researching the subject, with visits to Vietnam; access to official Vietnamese documents; and interviews with former VPAF personnel. Even after 40+ years since Saigon fell, coverage of the Vietnam War is still a sensitive subject and in spite of the author's efforts to be objective when looking at the air war from 'the other side' he appears to have fallen foul of some previous reviewers' objections to his impartiality. Until now almost all accounts of the Vietnamese air war have been written from a US point of view: inevitably, therefore, Roger's rather different perspective has attracted much criticism, particularly from the United States, as his writings challenge much of what have been perceived as "facts". This has resulted in Roger's clear sympathy with North Vietnamese claims causing some to question his impartiality: but how impartial have been the accounts already in print? Some could see this book as a counter-balance. However, in describing the VPAF's nearly 10 year struggle with the world's most powerful air force, the author does an admirable job. All this would bode well but for one quite prominent issue which has, unfairly in my opinion, resulted in some aviation enthusiasts questioning the author's credibility.

Rather unfortunately, the book is littered with mistakes throughout the text, some grammatical and others factual, to include quite embarrassing errors in the captioning of the majority of colour side profiles and some of the photographs. The majority of factual errors are all the more puzzling given that my main resources for cross-referencing the information were other titles in the same Hikoki series of books, including "Soviet and Russian Military Aircraft in Asia" by Yefim Gordon & Dimitry Komissarov'.





“MiGs Over North Vietnam” by Roger Boniface



The captions in over 50% of the colour side profiles are incorrect with, in the worst case, MiG-17 Frescos being labelled as MiG-21s, whilst many of the actual MiG-21 profiles carry the wrong variant nomenclature. Almost inevitably, many of these errors are then carried over into the captioning for at least some of the excellent photographs included in the book. The other, more curious, issue is the naming convention used for regions, cities and towns. For as long as I can remember, the capital of North Vietnam is Hanoi although it is referred to as Ha Noi in the text (However, Google translates Hanoi into Hà nội: Ed.) and there are several other places names that receive phonetic, rather than accurate, spelling. As I have already stated, the author has previously come in for much criticism over these errors but I will come to his defence in saying that Hikoki’s Editorial Team should take some of the responsibility for these problems. This is, after all, what editorial teams are

there for: to check for grammatical errors and the accuracy of information pertaining to specific technical content, whether it is text, photographs or illustrations.

To return to some of the more positive aspects of the book, there is an excellent chapter towards the end that details the exploits of three of the VPAF’s better known fighter pilots, all personally interviewed by the author and their experiences flow through the text. The author has also included some very useful annexes and appendices covering a wealth of information, including the VPAF structure; US air doctrine for Vietnam; US fighter and combat aircraft data; VPAF claims and pilot losses, again all lavishly illustrated with photographs and maps.

From my perspective, and in spite of the issues with accuracy, this remains an impressive book on a controversial and esoteric subject, where the author has masterfully captured through words, the fighting spirit, determination and dedication of a small and inadequately equipped air arm defending its national sovereignty. As previously stated, a large proportion of the imagery has been sourced from secretive national archives and personal collections and has, therefore, not been seen or published before. For the modeller, this book offers a wealth of new information on the colour schemes and markings sported by VPAF combat aircraft and should provide some inspiration in reproducing unusual and attractive subjects in model form, but extreme care will need to be taken to cross-refer the material with other sources, given the high level of unfortunate errors, particularly with the illustrations.

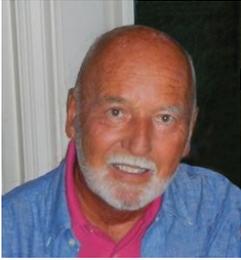
Highly recommended to anyone with an interest in the Vietnam Air War or Asian Air forces.

Mark Attrill



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"DIORAMAS AND MODELS—Part 1" by Bjorn Jacobsen

Bjorn Jacobsen is undoubtedly one of the most outstanding aircraft diorama experts in the world and he has kindly agreed to give us a unique insight into how he has made some of his astonishing dioramas.



F-4 Phantom II vs MiG-21 MF

The clash between the Giant and the Midget over Vietnam

Among fixed-wing aircraft, more F-4 Phantom II was lost than any other type in the Vietnam War. A total of 529 Phantoms were lost in combat. In comparison, North Vietnam lost altogether 131 MiG-fighters in combat (63 MiG-17s, 8 MiG-19s and 60 MiG-21s)

Only two American pilots became aces in the Vietnam War (5 or more enemy aircraft destroyed). In the North Vietnamese Air Force (VPAF - Vietnam People's Air Force), sixteen Vietnamese pilots became aces. Nguyen Van Coc was the Top Ace of Vietnam War with nine kills.

The following is the models and diorama of two of these adversaries which met in the sky above North Vietnam in January 1972: An RF-4C Phantom and a MiG-21 MF.

The Phantom's mission was to discover and photograph North Vietnamese supply routes. They were looking particularly for SA-2s, surface-to-air missiles that could make a real difference in the war.

The MiG's mission was to find and destroy American aircraft. The RF-4C were pilot Bob Mock and Weapon System Officer John Stiles. The MiG-21 was piloted by Nguyen Hong My. His MiG was armed with the Russian Atoll Air-to-Air missiles.



Interested in dioramas? Then be sure to check out member Tony Clayton's fascinating "Diaerama" CDs. Tony tours UK model shows and photographs interesting model displays, focusing on the more unusual dioramas. He then compiles them onto a series of CDs that he issues about 4 times per year. Find out more at <http://www.diaerama-magazine.com/diaerama-cd-rom-content.php>



"DIORAMAS AND MODELS—Part 1" by Bjorn Jacobsen

Building the MiG-21

I used an Eduard-kit for the MiG. This is a very good kit and a real pleasure to build.

The model was painted according to the description given by Hong My: Unpainted aluminium with Green Patches painted on the upper part.

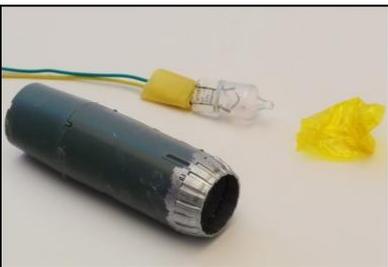
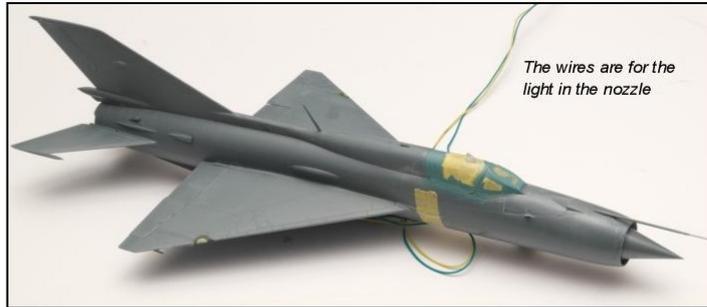
Most of the North Vietnamese MiGs were unpainted, and I started by painting the MiG in its natural metal colour.

The MiG had a green shaded aluminium colour on the upper sides, and I mixed a little green in the aluminium colour accordingly.

Then I hand painted the green patches with thinned paint (airbrush quality).

I had to paint the patches two or three times before the green colour looked realistic.

When I had used the green patched MiG for photography, I repainted it in aluminium colour to have both variants in some of my pictures.



I wanted the MiG to be as realistic as possible and decided to have some light in the nozzle to create the engine flames.

I used a 7W 12V halogen lamp which would not emit much heat, but still, gave enough light.

The heat is always a problem with electrical lights in confined areas, and if you want to do something similar, please chose a low watt LED lamp if possible. It produces less heat than a halogen lamp.

Try to use 9V or 12V current. Avoid 110 or 220V because these usually get very hot, unless you use a regulator to reduce the light (and the heat).

But whatever you choose as a light source, only use it for short intervals, and never leave it burning unattended.

Asian Aircraft Markings A History

Abkhazia



Abkhazia (Mi-24)



Abkhazia Helos & light a/c



Armenia



Azerbaijan (Early)



Azerbaijan (Current)



Chechnya (L-29)



Chechnya (Mi-8)



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“DIORAMAS AND MODELS—Part 1” by Bjorn Jacobsen

Building the RF-4C Phantom

I used the RF (1/48) from Italeri which was a very good kit to build.

The plane was camouflage as most of the USAF Vietnam fighters: Two shades of green and a light brown colour.

The decals were a little tricky as no decals of the #573 were available as far as I could see.

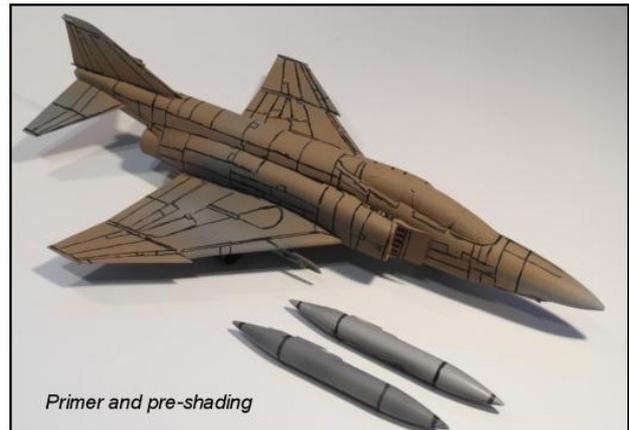
I, therefore, had to put together bits and pieces from my scrap book to make the correct registration of the aircraft.

Looking at pictures and drawings, I am fairly satisfied with the result.

I wanted to have flames from the Phantom nozzles and inserted one 7W 12V lamp into each nozzle (see comments under the MiG section on the previous page).



Ready for the first layer of paint



Primer and pre-shading



Painted, waiting for decals



Finished.



Afterburner on!



The wires to the lights in the engine nozzles were thin and easy to conceal. Yellow cellophane was used to give the light a warmer colour.

The lights in the nozzle are not intended to be part of a permanent static display, the heat from the lamps I used will eventually melt the plastic if it's on for a long time. There might be LED lamps which do not cause heat which can be used permanently, but when I built this model, that was not an option.

In this case, the gimmick with the lights in the nozzle is made more for fun and picture taking, than for anything else.



"DIORAMAS AND MODELS—Part 1" by Bjorn Jacobsen

The model of the Phantom was more or less destroyed during all the changes I had to make. First, I built the complete Model; then I had to rip the tail apart and make the explosion caused by the Atoll missile. Then I had to remove the canopy and the seats and make the ejection scene and add trailing smoke to the stricken aircraft.

The Atoll missile exploded so close to the Phantom that part of the tail (maybe the whole tail) was blown away.

This happened when the plane was in flight, and I could not make an ordinary explosion with smoke, the speed would be far too high for that.

The explosion was built around a chicken wire cage which I fixed to the tail.

Yellow cellophane was used to create some colour and cotton to illustrate the explosion fumes.

I used two 7W Halogen lamps (12V) to illustrate the explosion.

I ripped off the vertical stabilisers and did some serious damages to the tail.

To make it look authentic, I used very thin metal sheets which I glued to the holes in the tail.

The crew ejected and was picked up by helicopter and brought unharmed back to base.

As a matter of fact, they did not have a clue what hit them, and the incident was logged as "hit by 37mm AA grenade."

To finish the story, I made the ejection with the help of a LED light, a brass rod and some cotton.

Because of the speed, the smoke from the ejection rockets trailed backwards.

As far as I know, the RF did not start to burn, but it trailed smoke when going down.

This smoke was made with cotton glued to a rod and painted black.



The tail is ripped apart.



Thin metal sheets are glued to the damaged parts.



The damage.



Chicken wire and cellophane.



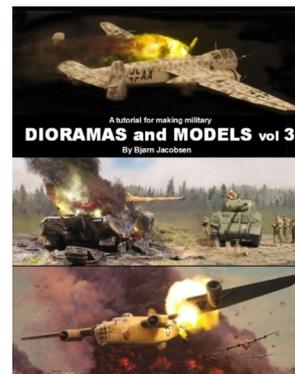
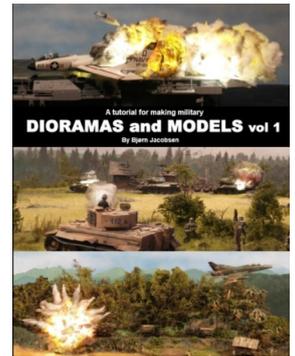
Above:
A thin layer of cotton around the chicken wire – and lights!

To the left:
The ejection seat was fixed to a metal rod which also holds the LED light and the cotton (unpainted)

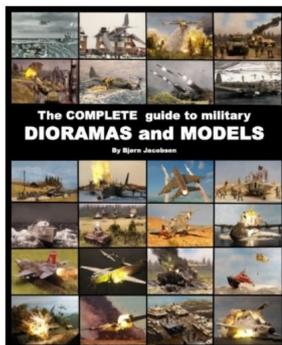
The smoke from the damaged aircraft was cotton painted black and fixed to a rod inserted in the aircraft.



These articles taken from Vols. 1, 2 & 3



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For all who want to learn more about building military dioramas:
All I know about building dioramas is gathered in these books – in great detail
Happy Modelling!

Bjorn Jacobsen

Prices and description at Amazon or on my website:

www.dioramas-and-models.com

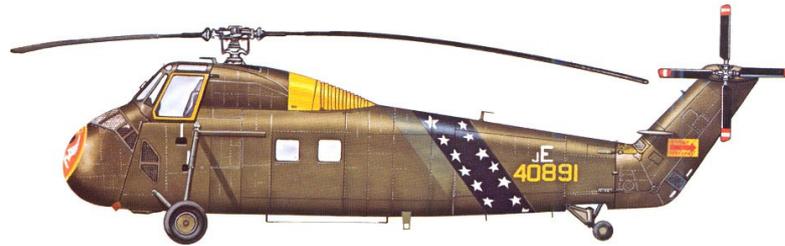
The books are also available in well-assorted hobby shops

To read the rest of this fascinating and inspiring article click this image.





Sikorsky UH-34 in the South Vietnamese Air Force - by Mark Attrill



The embryonic South Vietnamese Air Force gained its first experience with rotary wing operations in 1958 when it received the first batch of former French Armée de l'Air H-19 Chickasaw helicopters from the United States Air Force and although the type was supplied in relatively low numbers it soon proved the value of the helicopter in overcoming some

of the challenges associated with operating in the rugged, and often inhospitable, environment of Indo-China. The Sikorsky H-19s in VNAF Service were largely limited to airlift and search & rescue missions although, by the early 1960s, the land campaign in Vietnam was gathering momentum as the Communists probed further South and it became clear that in order to improve the mobility of the Army of the Republic of Vietnam (ARVN), a more capable helicopter would be required.

The US responded to requests for additional support with a supply of H-34 Choctaw medium lift helicopters with a plan to deliver 30 aircraft in 1963 and 18 in 1964. This was deemed sufficient to equip two Squadrons: the recently re-designated 1st Helicopter Squadron, which became the 211th at Tan Son Nhut, and the 213th Helicopter Squadron at Da Nang. Equipping the VNAF with the larger H-34 Choctaw vastly improved the ARVN's capability to move large numbers of troops around the battlefield quickly and reduced the reliance on locally based reserves of troops to secure territory over time. As a result the US Authorities ramped up deliveries of surplus H-34C Choctaws and H-34D Sea Horses from the US Army and US Marines respectively so that two further 'regular' Squadrons (215th and 217th) and one Special Operations Unit (the 219th Helicopter Squadron) could be formed. Accordingly, between 1962-69, the H-34 variant became the primary VNAF rotary wing asset, with no less than 230 aircraft delivered over a seven year period. The establishment of the four standard Squadrons, each notionally equipped with 24 aircraft, permitted the VNAF to assign one Squadron to each of the ARVN's designated Corps Areas within South Vietnam. In spite of providing the VNAF and ARVN with a quantum leap in battlefield mobility, the H-34 was not without problems and its somewhat lumbering performance and high maintenance requirements led to a high attrition rate over time. As a result, the US and VNAF authorities accelerated the programme for re-equipment with the Bell UH-1D/H Huey, such that the first unit received the new aircraft in May 1969 with all of the H-34s retired from service with the VNAF by the end of the year. Official records from September 1969, by which time the majority of H-34s had been replaced, indicated a 80% attrition rate among all H-34s delivered to the VNAF.



An interesting photo of two VNAF H-34 Choctaws illustrating the different application of national and/or maintenance/safety markings to the airframes, as outlined in the text.

Note in particular the different position of the VNAF 'Stars and Bars' on the fuselage sides.

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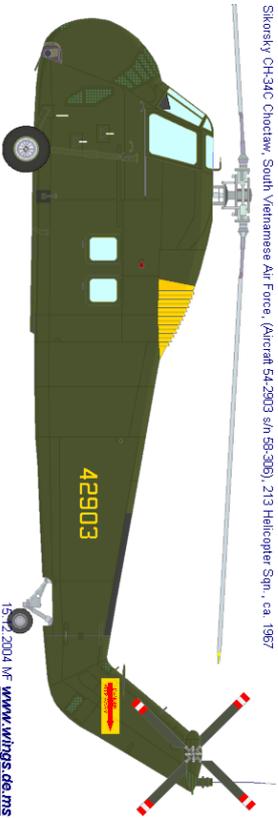
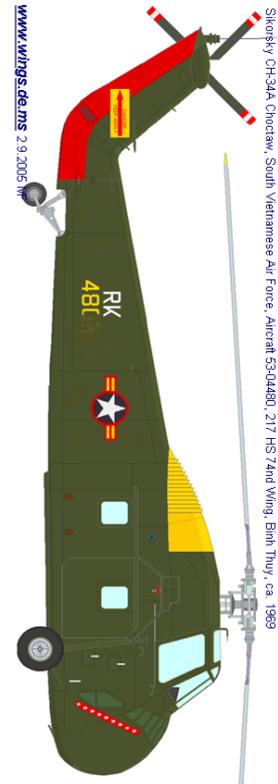
Sikorsky UH-34 in SVAF – Part 2



This H-34 Choctaw belongs to the 217th Helicopter Squadron as indicated by the 'RK' codes and the dark red 'cheatline' around the trailing edge of the lower surfaces of the tail pylon, which features the black stars associated with the 74th Tactical Wing at Binh Thuy AB. Note the unusual position of the VNAF insignia on the fuselage sides. The application of the unit codes would indicate that this photo was taken in the late 1960s, with the expansion of the VNAF helicopter force.

Colours and Markings

The vast majority of VNAF UH-34 helicopters was delivered, and only ever operated, in the standard U.S. Army Olive Drab (FS34088) or USMC Field Green (FS34095) colour scheme, although several examples sported non-standard camouflage schemes, mainly associated with their use with the 219th Helicopter 'King Bee' Squadron and Special Operations Units. Over time, those aircraft operated by the standard VNAF Helicopter Squadrons and wearing the overall Olive Drab colour scheme began to emerge with differing styles and location of national markings. The 'Stars and Bars' could be found on various locations on the fuselage sides and some aircraft carried the VNAF yellow and red fin flash on the tail pylon. As the number of VNAF Squadrons operating the H-34s increased, individual Unit or Base Designation Codes were adopted, usually applied to the fuselage sides above the aircraft serial/call-sign number and, in some cases, unit insignia applied to the large clamshell engine access doors ahead of the cockpit. Some aircraft also adopted individually coloured rear engine fairings on the upper fuselage surfaces with yellow observed on machines operated by both the 213th and 217th Helicopter Squadrons, and red on 215th Squadron aircraft. Over time, individual Wing or Unit markings were also applied to the fuselage. Aircraft operated by the 213th Squadron at Da Nang in the mid-1960s sported the dark blue band with white stars associated with the 41st Wing, midway down the fuselage while some 217th Squadron aircraft had a red 'cheatline' along the trailing edge of the lower tail pylon with Black Stars.



This interesting close-up shot of a H-34 crew, and what appears to be an impromptu hunting party out in the countryside, is noteworthy in that the helicopter is sporting a Tactical Wing badge below the cockpit, which was unusual. The Wing Badge would also appear to be 'handed' since the official insignia is the other way around (i.e. with the '33' in the top left hand corner etc) which suggests it was applied on both sides of the fuselage. This helicopter was almost certainly operated by 211 Helicopter Squadron, which formed part of the 33rd Tactical Wing in the mid 1960s.



Sikorsky UH-34 in SVAF—Part 3

Most of the Special Operations configured aircraft, probably operated by the 219th Helicopter Squadron, had a two-tone Olive Drab/Tyre Black camouflage scheme applied to the upper surfaces with Light Grey or Off White lower surfaces with a scalloped demarcation line. These aircraft were totally devoid of any markings, including safety and maintenance stencilling although they did wear a stylised low-visibility King Bee symbol on the fuselage sides. Some field application of camouflage to other Special Operations aircraft obviously took place over time; at least one H-34 sported light coloured (Tan/Light Brown) wavy lines on the upper fuselage surfaces.

VNAF UH-34 Units – 1962-70

Unit	Wing	Location
211 th Helicopter Squadron	33 rd Tactical Wing	Tan Son Nhut
213 th Helicopter Squadron	41 st Tactical Wing	Da Nang
215 th Helicopter Squadron	23 rd Tactical Wing	Bien Hoa
217 th Helicopter Squadron	74 th Tactical Wing	Binh Thuy
219 th Helicopter Squadron		Da Nang*

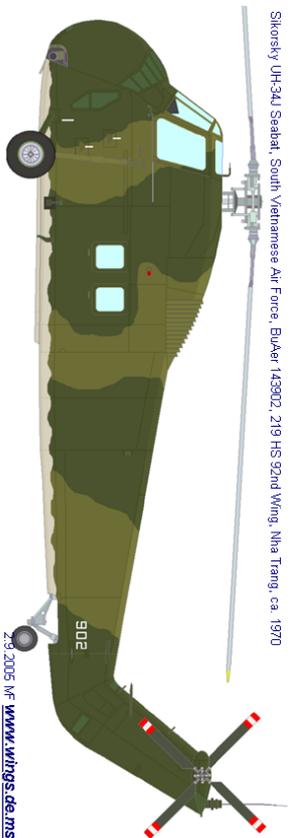
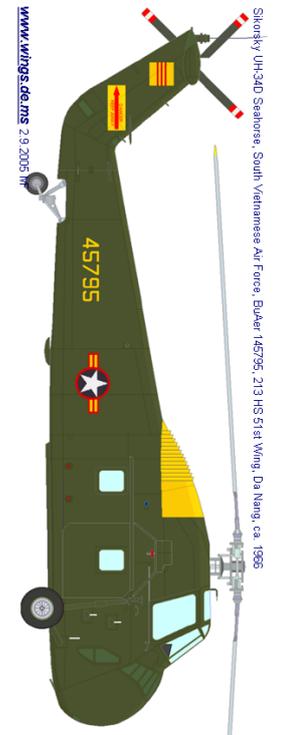
* Home Base – the primary role of the H-34s operated by the 219th meant that they were frequently operated from other Main Operating or Forward Operating Bases in the Central and Northern areas of South Vietnam.



One of the 219th Helicopter Squadron 'King Bee' aircraft, used for special operations and sporting the unusual three-colour camouflage scheme described in the text. These aircraft were totally devoid of markings with the exception of a small black unit insignia midway along the fuselage.



Another 'standard' overall green VNAF H-34 illustrating yet another variation of markings. Although this is a low quality B&W shot, it would appear the '138464' serial applied in yellow on the fuselage sides has the last four repeated in white on the lower tail pylon surfaces. Note the absence of the Stars and Bars markings on the fuselage sides but the retention of the VNAF fin flash on the tail pylon.





Sikorsky UH-34 in SVAF (Continued)

The Sikorsky UH-34 Choctaw in Model Form

In spite of the widespread use of the Sikorsky H-34 Choctaw, and its many derivatives, by a large number of worldwide operators over an extended period, the type has not been extensively covered by the kit manufacturers over the years. In recent times, this indifference to the type has been addressed and, as a result, the modeller now has some high quality kits to choose from in both of the most popular scales. Italeri produced an excellent kit of the Sikorsky UH-34D Sea Horse in 1996, which has been re-issued several times since with different parts and decals. Care will need to be taken in selecting a particular boxing since the UH-34 sported two different styles of main landing gear during its service and kits with the 'V' shaped lower mountings should be avoided since VNAF aircraft were equipped with the later 'S' shaped mounting point. The Italeri kit is nicely detailed although, unfortunately, none of the initial or re-issued kits include any VNAF options. It should also be noted that the kit is not in Italeri's current catalogue so it is not readily available but it is still reasonably easy to source via retail outlets or second-hand traders.

More recently, Hobby Boss of China, have produced an example of the UH-34D Choctaw in their rapidly expanding range of 1:72 scale helicopters and it appears to be one of their better kits. There are one or two detail issues, mainly with the cockpit and cabin, which would need to be addressed by the more fastidious modeller and it does suffer from an abundance of ejector pin markings. The Hobby Boss kit does, however, feature excellent drooped main rotor blades and is an otherwise very nice and accurate representation of the original. As a bonus, one of the kit decal options is for a VNAF example, with a very large and colourful Unit Crest and fuselage bands which somewhat compromise the standard Olive Drab colour scheme. The vast majority of rotary wing kits in 1:72 scale do not attract much attention from the aftermarket manufacturers so there are not that many resin or photoetched sets with which to embellish any model and most are related to the Italeri kit.



[Rotor Craft 1/72 Westland Wessex/UH-34 resin fuselage plug that corrects the short length of Italeri Westland Wessex and Sikorsky UH-34 kit.](#)



MAKE	REFERENCE No.	ITEM	NOTES
Hobbyboss	HB87222	Sikorsky UH-34 Choctaw	Original Issue – Includes Decals for UH-34 (40891/JE) of the 213 th Helicopter Squadron, VNAF, Da Nang AB, 1966.
Italeri	IT0066	Sikorsky UH-34J Sea Horse	Original 1996 Release
Italeri	IT1066	Sikorsky UH-34J Sea Horse	
Italeri	IT1417	Sikorsky HSS-1 Sea Bat	Re-Issue with new decals
ResKit	RS72-043	Sikorsky UH-34 Wheel Set	
New Ware	NWAM300	Sikorsky UH-34 Mask Set (Basic)	
New Ware	NWAM301	Sikorsky UH-34 Mask Set (Expert)	



Sikorsky UH-34 in SVAF (Continued)

In the larger 1:48 scale an earlier Revell-USA release of the Sikorsky UH-34 Choctaw from circa 1988 can now be largely discounted, with the 2012 release of the superb Gallery Models/MRC family of early H-34 helicopters and the Italeri kit of the Sikorsky UH-34J Sea Horse in 2016. The Gallery Models/MRC is the more comprehensive of the two most recent kits, with a highly detailed cockpit, cabin and engine compartment. The original issue included no less than four different boxings, covering US Army, US Marine and USAF variants and care will need to be exercised when selecting the correct kit for any VNAF project. The majority of parts in each kit are identical although some of the main undercarriage arrangements seen on the real aircraft are catered for, but not duplicated, in either of the kit issues. The Italeri kit based on the earlier, highly acclaimed, licence-built Westland Wessex kit with the appropriate parts to build the UH-34 on which the British variant was based. The Italeri kit is a simpler affair than that offered by Gallery Models/MRC but will still make up into an attractive replica, particularly if the modeller is not too concerned with interior details. Incidentally, since Gallery Models/MRC are not a prolific manufacturer of kits, their distribution network is somewhat limited and their kits are not the easiest to locate; fortunately Trumpeter appear to have taken over the moulds and have already announced that two of the kits will be re-released in the near future, so availability of this fine kit will hopefully be more assured.



As with my previous overviews, I have prepared a list of all of the known aftermarket items that have been produced to date (September 2019) to correct or complement the Hobby Boss and Italeri 1:72 scale family of Sikorsky UH-34 and the Gallery Models/MRC 1:48 scale kits. For one reason or another, some rotary wing subjects do not attract much attention from aftermarket companies so the list in both scales is rather limited, although there are some items designed for other variants that will work equally well with the Sikorsky H-34 variants. Where this is the case, I have listed these items for completeness.

1:72 Scale – Hobbyboss/Italeri

Make	Reference #	Item	Notes
Hobbyboss	HB87222	Sikorsky UH-34 Choctaw	Original Issue – Includes decals for UH-34 (40891/JE) of the 213 th Helicopter Squadron, VNAF, Da Nang AB, 1966.
Italeri	IT0066	Sikorsky UH-34J Sea Horse	Original 1996 release
Italeri	IT1066	Sikorsky UH-34J Sea Horse	
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New Ware	NWAM300	Sikorsky UH-34 Mask Set (Basic)	
New Ware	NWAM301	Sikorsky UH-34 Mask Set (Expert)	



Sikorsky UH-34 in SVAF (Continued)

1:48 Scale – Gallery/Model Rectifier Company (MRC)/Italeri

Make	Reference #	Item	Notes
Gallery/MRC	GM64101	Sikorsky H-34 'US Marines'	
Gallery/MRC	GM64103	Sikorsky UH-34 'US Army Rescue'	
Gallery/MRC	GM64106	Sikorsky UH-34D Sea Horse	'Operation Deep Freeze' Boxing
Italeri	IT2712	Sikorsky UH-34J/H-34G-III	
Trumpeter	TU02881	Sikorsky H-34 'US Marines'	Gallery Re-Issue – Future Release
Trumpeter	TU02882	Sikorsky H-34 'USAF'	Gallery Re-Issue – Future Release
Eduard	ED49666	Sikorsky H-34 – Cockpit/Cabin Seat Belts	All Variants
Eduard	ED491030	Sikorsky H-34 – All Variants	Future Release
Eduard	EDFE1030	Sikorsky H-34 – All Variants	Future Release
Eduard	EDFE1031	Sikorsky H-34 – Cockpit/Cabin Seat Belts	STEEL Type - Future Release
ResKit	RS48-043	Sikorsky UH-34 Wheel Set	
SAC	SAC48-216	Sikorsky UH-34 Undercarriage Set	USMC Type
SAC	SAC48-261	Sikorsky UH-34 Undercarriage Set	US Army Type
Eduard	EDEX394	Sikorsky UH-34 Cockpit Masks	For Gallery/MRC Kit
Flying Leathernecks	FLM48-004	Sikorsky UH-34 Cockpit Masks	For Italeri Kit



Two KingBees waiting to be refueled at an unknown airfield.

Two 'King Bee' H-34s awaiting fuel prior to a mission.



A VNAF H-34 Choctaw from 213 Sqn taxiing out for another sortie, sporting a prominent example of the unit badge on the engine access doors with the squadron number underneath.



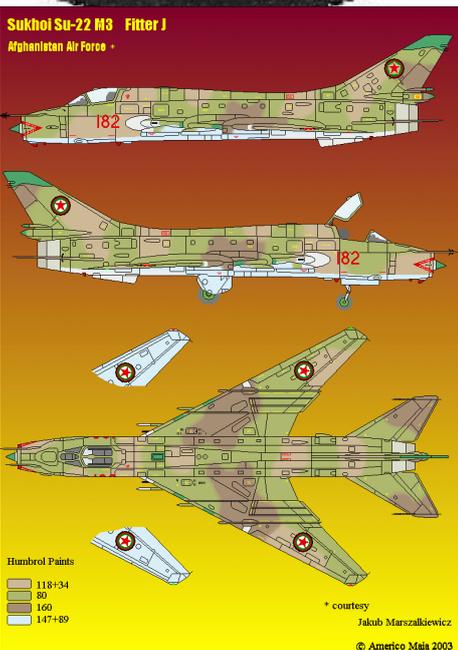
A Brief Synopsis of the Sukhoi Su-22 in Afghanistan by Tom Cooper



Afghanistan received around 30 Su-22s and Su-22M3Ks during the early 1980s and these saw relatively intensive combat against the Pakistan-supported Mujahedeen while in service with the Bagram-based 355th Aviation Regiment.

Around 45 Su 22M4Ks entered service starting in 1984–87. Attrition was heavy: not only were some aircraft sabotaged on the ground, other crashed due to pilot errors, around a dozen were shot down by insurgents, and three were claimed as shot down by Pakistani F-16s. Meanwhile, one pilot defected with his brand-new Su-22M4K to Pakistan.

Nevertheless, about three dozen Su-22s remained operational after the Soviet withdrawal from Afghanistan in 1989. Following large-scale defections from the air force, most were in the hands of opposition forces by 1995, when the Taliban rapidly brought most of Afghanistan under its control. More defections followed, enabling the Taliban to establish its own air force that included some six Su-22s and Su-22M4Ks, flown by Afghan pilots. These continued operations until the US-led intervention in October 2001, when most of the aircraft were destroyed on the ground.



Click image for video of Afghan flight operations.



A Brief Synopsis of the Sukhoi Su-22 in Vietnam—by Tom Cooper



Vietnam acquired 40 Su-22M3Ks and three Su-22UM3Ks that were delivered in 1980–84; these were assigned to the 923rd Regiment. The type saw some action against Cambodia, and against local insurgents during the war in Laos later in the same decade. In 1989 the VPAF received the latest Su-22M4K version, 16 of which were delivered. 40 additional Su-17M4s and Su-22M4Ks were also acquired second hand from the Czech Republic, Poland, Ukraine, and Russia. In 1998, a Sukhoi/

KnAAPO team in Russia upgraded 54 aircraft, including the full fleet of Su-22UM3Ks.

Today, around 40 Vietnamese ‘Fitters’ remain in service with three regiments: the 921st Regiment at Noi Bay has operated the Su-22M3K, Su-22M4K and Su-22UM3K since 2012; the 929th Regiment at Da Nang has a single squadron of Su-22M4K and Su-22UM3K aircraft; the 937th Regiment at Than Son (Phan Rang) also operates the Su-22M4K and Su-22UM3K. In 2015 the 937th Regiment lost two Su-22s (serials 5857 and 5863) after they collided and crashed into the sea. Both pilots were killed.

Overall, the story of the Su-20/22 in worldwide service is obviously approaching its end. Nevertheless, the remaining examples are still well appreciated by their crews, and are likely to continue soldiering on for a few years longer. *Tom Cooper*





Sukhoi Su-22 in Model Form



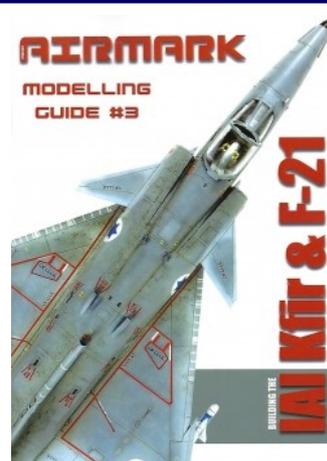
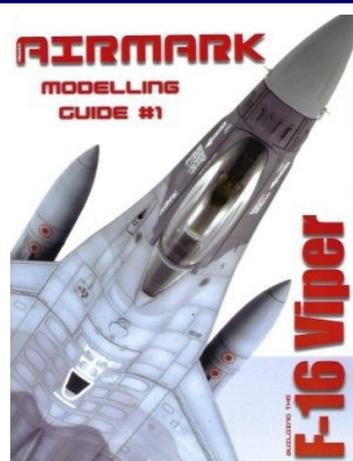
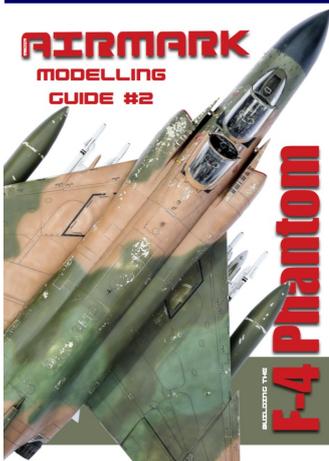
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