

ASIAN AIR ARMS NEWSLETTER 22

August/September 2020

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BRIAN'S LAST UPDATE AT ASIAN AIR ARMS RESEARCH GROUP!



Well, it's now time for me to be put out to graze! After quite a difficult year for me, I've taken the decision to step down as Leader of Asian Air Arms Research Group/SIG and am handing over the reins to Mark Attrill (see below). I started this group almost four years ago with five supporters. From this small start we have now attracted nearly 500 members from 54 countries; we exhibit at most of the major UK shows; produce decals; and every two months create a full-colour, bi-monthly Newsletter of over 30 pages. Whilst I'm withdrawing from the leadership I shall, for several months, continue to edit the Newsletter and handle the membership data base. I should like to thank you all for the terrific support you've given to me and the group—it has been a HUGE pleasure to be friends with you and I shall always remember your irrepressible enthusiasm. Thanks to every one of you—from Singapore to Venezuela, and from Norway to New Zealand. You are a great bunch of friends.



Your new SIG Leader—Mark Attrill.

It is with great pleasure, but also with a degree of trepidation, that I have accepted the invitation to take over the leadership of the Asian Air Arms Special Interest/Aviation Research Group from Brian, with effect from 30th September 2020. As some of you are aware I spent many of my formative years growing up in South East Asia, during which time my interest in military aviation and, more specifically, the air arms of South East Asia and Australasia, I've first kindled. Since then, I have served with the Royal Air Force in Hong Kong for three years and also travelled extensively throughout the continent during other tours of duty, all of which has maintained my interest in this fascinating region of the world, so it was only natural for me to be drawn into membership of the Special Interest Group some two years ago. To now be invited to lead this particular Group, which must surely have grown into the largest and most diverse SIG sponsored by IPMS(UK), is humbling but also a great honour.



At the same time, it is also quite a daunting prospect given the pedigree and record of our first Special Interest Group Leader, Brian Griffin. It is only through Brian's vision, drive and enthusiasm coupled with his professional marketing skills, that this particular Group has thrived in the way that it has and attracted such an august body of experts, researchers, analysts and enthusiasts to its ranks. I believe one of the major strengths of this particular Group has been the ability to combine the primary role of a modellers' Special Interest Group, in the true spirit of the original IPMS(UK) Charter, with the needs and requirements of those wishing to utilise the resource for broader applications, including research and publication. As a result of Brian's vision and leadership, we have evolved into a Group that has attracted attention from not only a very wide range of aviation authors, researchers and publishers, but also from aftermarket manufacturers and suppliers within the hobby.

I would, therefore, like to take this opportunity to thank Brian for taking the first brave steps in founding the Asian Air Arms Special Interest/Aviation Research Group and for his outstanding leadership, enthusiasm and continued guidance since inception. I appreciate that it is a commonly used phrase and do not underestimate that it will be very difficult to 'follow in his footsteps', but I believe it is now my duty to maintain and preserve Brian's legacy into the future. I am also delighted that Brian has agreed to retain some residual responsibilities through which he will maintain some contact with a Special Interest Group for which he has done so much in the past. Changeover date will be the 30th September—from then on please contact me in the first instance, and to submit new articles, at tigerpress@aol.com.



Thanks so very much for all your generous contributions to our appeal. Your response had been most heartening and ensures that the website will continue to flourish and that I'll be able to hand over the surplus funds to Mark, for him to use to take our group on to even greater heights in the coming year.

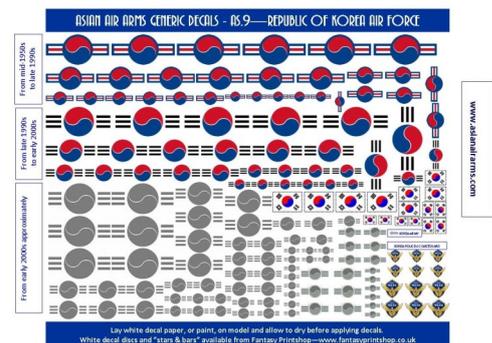


Next issue sees the third and final part of Mark Attrill's unique and comprehensive analysis of the use of the Mil Mi-24/35 series throughout Asia, focussing on Mongolia, North Korea, Myanmar, Cambodia, Vietnam, Indonesia and Papua New Guinea. Mark's magisterial research has resulted in the first fully comprehensive account of the Hind's service in all the air arms of Asia, and we are very grateful to him for making it available exclusively to members of the Asian Air Arms Research Group through our Newsletters.



Asian Decals—I shall be continuing to produce generic decals on Asian subjects and they will be announced in the Newsletters. They can be ordered directly from our website. Our latest set will cover the ROKAF and I'm showing here a draft layout (subject to updates). It should be available within the next month.

Furthermore, it's very likely that a third set of Afghan markings will be produced in collaboration with Lukas Müller, the author of "Wings Over the Hindu Kush" which brilliantly covers Afghan Air Force operations in the late 1900s and early 2000s. This new decal sheet will add to our existing two sheets and, together, they'll allow you to represent just about every Afghan marking variation since 1945.

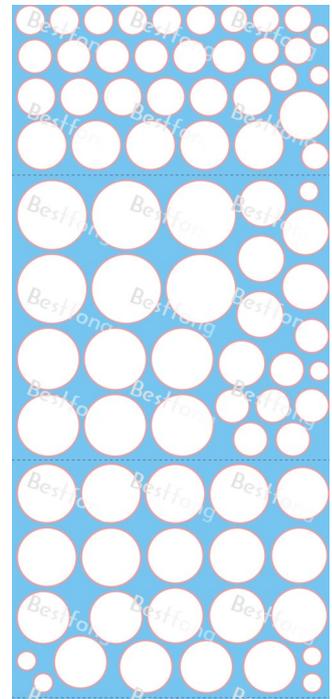




YAK-130 IN 1/48—MYANMAR AIR FORCE Modelled by Tin Aung Yin



Bestfong



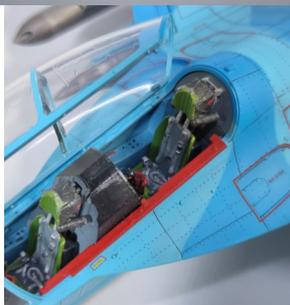
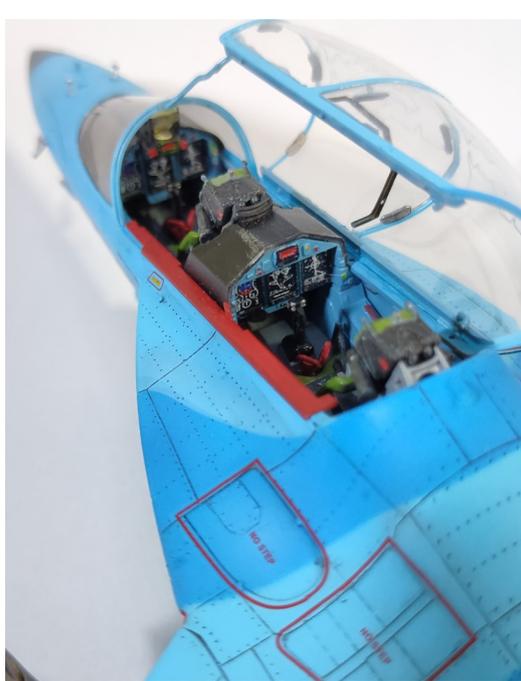
Yakovlev Yak-130
Myanmar Air Force
Zvezda 1:48 Scale
Tin Aung Yin (Lion Knight)



Yakovlev Yak-130
Myanmar Air Force
Zvezda 1:48 Scale
Tin Aung Yin (Lion Knight)



Yakovlev Yak-130
Myanmar Air Force
Zvezda 1:48 Scale
Tin Aung Yin (Lion Knight)



Bestfong 1/72 72089

Chengdu J-10
in PLAAF

GUNZE Air Color ■ 311-316 (some) ■ 33 Black ■ 305 Grey ■ 61 Burn Metal ■ 316 White

Bestfong 1/72 72090

Nanchang K-8
in PAL NAVY Airforce

GUNZE Air Color ■ 33 Black ■ 3 Red ■ 1 White ■ 328 Blue



1/48 review

RUSSIAN LIGHT GROUND-ATTACK AIRCRAFT **YAK-130**



1/72 review

RUSSIAN TRAINER AIRCRAFT **YAK-130**



Valom's 1/48 Britten Norman Islander (VAL48014) Reviewed by Mark Attrill



The highly successful British designed Britten-Norman BN-2 Islander Twin-engine light utility regional airliner and its military configured variant, known as the Defender, has seen Service with over thirty military operators worldwide since the first deliveries of this excellent aircraft were made in the early 1970s. At least eight Asian military or para-military Air Arms have operated the aircraft, mainly in Maritime Patrol, Coastguard or liaison duties and examples are still serving today.

I had more than one reason to celebrate the announcement in 2019 of a new kit of the Britten-Norman BN-2A Islander from little known Czech manufacturer Valom in 2019 and particularly with the fact that the kit would be in 1:48 scale. I have a close family connection

with the Isle of Wight, where the original Britten-Norman factory was located and spent the latter part of my education at Bembridge School, which was less than a mile away from both Bembridge Airport and the factory. In the late seventies, the Islanders and their larger three-engined Trislander brethren were rolling off the production line on a regular basis so the aircraft were often seen in the local area, either lined up on the delivery apron or conducting test flights for new customers. Quite apart from the fact Valom are known mainly for their production of rather esoteric types in 1:72 which include British Inter- and Post-War transport types such as the Bristol Bombay, Handley-Page Harrow and Vickers Valetta; The BN-2 Islander has been their first foray into the bigger scale and I must say that the results are quite impressive, with no less than seven individual releases of the kit so far, covering a wide range of sub-variants and colour schemes. For those not familiar with Valom kits, they are billed as short-run kits but in reality they are rather similar in quality to the more recent Special Hobby kits which now rival the so-called mainstream kits from the like of Airfix, Eduard and Revell.

For obvious reasons I selected the Britten-Norman BN-2A Islander 'Philippines Coast Guard' issue of the kit for this preview although much of what I comment on here applies to all of the different boxings since the kit parts are essentially the same. On opening the box, the modeller is presented with three medium tan coloured plastic sprues, one more in clear plastic, a photo-etched fret, clear film instrument dials and a set of decals. The parts are all contained in one plastic bag, in which there are separate bags to protect the clear parts, decals and photo-etched parts. The decal sheet in this boxing provides markings for the aforementioned Philippine Coast Guard BN-2A in an overall White colour scheme with Red/Black high visibility striping and prominent 'Coast Guard' titles with a second option of a Philippine Navy aircraft sporting an overall Dark Grey colour scheme and low visibility national markings and titles. The nicely printed instruction sheet includes a very useful paint chart with FS numbers and cross-references for four different paint ranges including Gunze Sangyo and Humbrol, together with full colour four-view profiles for the two marking schemes. The plastic parts are common to all of the BN-2A kits so include items that are surplus to requirements. In this case, the extended wing tips, pointed nose and one type of engine cowling are not required. Where there are more major variations in equipment fits, such as in the Danish Coast Guard kit, additional resin parts are included. The parts are crisply moulded with well-defined detail and fine engraved panel lines; the main characteristics of the fuselage, mainplane and flying surfaces are well captured.

The aircraft cabin is bound to be a focal point of this model, given the number of windows and doors through which to view it. Valom have done an excellent job in portraying the relatively simple layout of the original. The main instrument panel is made up from plastic, photo-film and photo-etched parts with seat belts for all of the crew and passenger seating and the rudder pedals also rendered in photo-etched material. The main cabin includes three bench style rows of seating although I suspect this is a generic arrangement and probably not applicable to the two aircraft. I would imagine that at least one of the options in this particular kit has a slightly different cabin arrangement in order to accommodate maritime surveillance equipment. While on the subject of the cabin, one oddity with this kit is the inclusion of a separate pilot's access door, which is rendered in clear plastic (Part C10). All of the doors are moulded in the shut position and there is no reference in the instructions to an option for cutting out the pilot's door and substituting it with the clear plastic part. The bulk of the kit would appear to go together quite quickly given the relative simplicity of the design. Care will need to be taken to ensure enough ballast is packed into the nose to prevent a tail sitter' – the instructions are not the clearest I have seen and this will be further complicated by the lack of locating holes or even indicators for some of the parts so a methodical approach is highly recommended. It should be added that the extensive PE fret includes additional parts to detail elements of the undercarriage and the fuselage, and in this case, the instructions are actually very clear. The only part of the kit that I disliked was the presentation of the wheels, with two halves that have to be joined without any locating pins. This will, most likely, be a bit of a chore so I would welcome one of the more enterprising aftermarket manufacturers producing a resin replacement set in due course. The nicely printed, in register decal sheet includes all of the markings required for the two versions, including separate window seal markings for the Philippine Navy aircraft.

All in all, this is a very nice kit of a long neglected subject – I believe the only other kit has been the old Airfix 1:72 scale kit from the early 1970s which is long overdue for re-tooling. (Ed. **Scalemates** are listing other kits in 1/144, 1/72 and 1/48, but I don't know how many made it to market.) Valom have clearly built on their growing reputation for producing nice 1:72 kits of some quite esoteric, mainly American and British subjects, with an impressive entry into 1:48 scale. Long may it continue. Highly recommended. **Mark ATTRILL**





FOR OTHER ASIAN USERS OF BRITTEN NORMAN ISLANDER REFER TO NEWSLETTER SEPTEMBER 2018



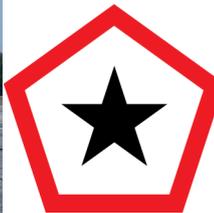
PHILIPPINES NAVY AND COAST GUARD

ROYAL CAMBODIAN AIR FORCE



ROYAL HONG KONG AUXILIARY AIR FORCE

INDIAN NAVY



INDONESIAN ARMY AND AIR FORCE

PAKISTAN MARITIME SECURITY AGENCY



ROYAL THAI AGRICULTURAL COMMISSION



J-Hangarspace

The Go-To Website for Information on Japanese Aviation

www.j-hangarspace.jp



1/48 Boeing AH-64D/E Apache—World Operators Decal Review—Caracal CD48-170



One of the most recent releases from US decal manufacturer, Caracal Models, will be of interest to Asian Air Arms fans. The sheet covers the Boeing AH-64D/E Apache attack helicopter in Worldwide Service and includes decal markings for no less than sixteen different aircraft. Not surprisingly, eight of the options cover 'homegrown' US Army types but four of the remaining options cover AH-64D/Es operated by Asian Air Arms, in no less than three different colour schemes, two of which make a welcome change from the standard overall Olive Drab paint scheme applied to the vast majority of Apaches in service. The first option covers a recently delivered AH-64E Apache of the Indian Air Force, which sports an overall Light Grey colour scheme with some detail picked out in Olive Drab, most notably the nose-mounted Target Acquisition array. India is due to

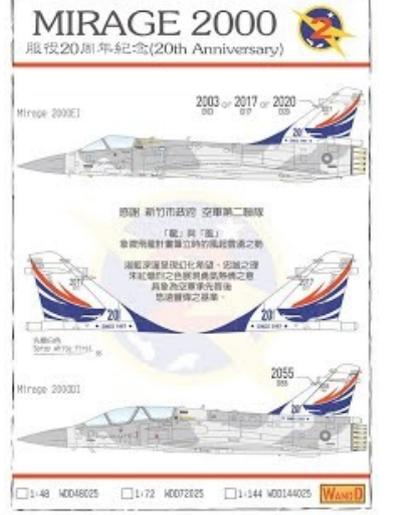
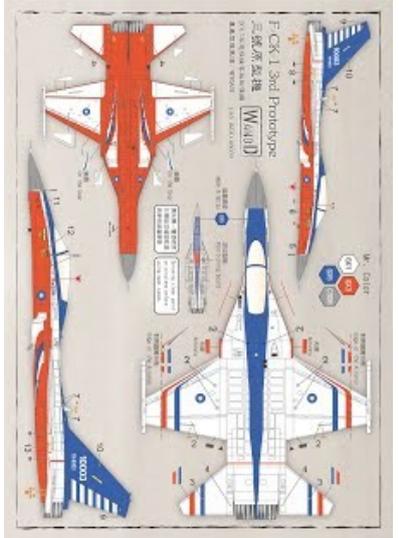
form a new unit, the 137th Helicopter Squadron, in 2020 to be equipped with this new aircraft. The second option is for another recent delivery, this time an Indonesian Army AH-64E of 11 Squadron, which sports a rather unique two-tone Dark/Medium Green camouflage scheme with low and high visibility national markings. An overall Olive Drab AH-64D operated by 120 (Kestrel) Squadron of the Republic of Singapore Air Force is next, again with low visibility national markings although the rather uniform appearance is broken up with a full colour Red Kestrel Unit motif applied to the tail pylon. Last but not least is another AH-64E, sporting the standard overall Olive Drab colour scheme and as operated by either the 1st or 2nd Attack Helicopter Group of the 601st Airborne Brigade of the Republic of China (Taiwanese) Army.

The quality of the decals is, once again, assured since Caracal have built up a very good reputation for accuracy, clearly demonstrated by their reference to one small inaccuracy that crept in with the serial number of the Indian Air Force example on the instruction sheet and which can be easily corrected, and the fact that the sheet has been printed by Cartograf of Italy. My one reservation is with the rather sparse decal placement instruction sheet, which can only really be described as minimal. The colour side profiles are nicely rendered and provide sufficient detail, together with the stencil placement guide, to enable the modeller to correctly place the decals. Likewise, there is a basic colour reference chart included with the instructions but I would have liked to have more detail on the individual types, including basic unit information or to highlight airframe differences between sub-variants. Of course, the dedicated modeller will always find out these details themselves (as I did with identifying the individual units for this review) and my guess is that Caracal Models work on this basis but I do personally feel this detracts from the overall package.

That said, and whilst Caracal Models will understandably continue to focus on US-orientated subject matter, there are positive signs that they will expand their range to include more esoteric types and operators so I, for one, will continue to support their endeavours.

Highly recommended – Preview sample courtesy of my wallet !

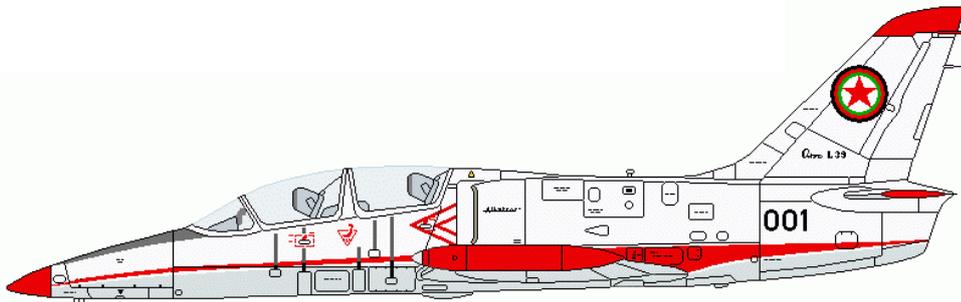
Mark ATTRILL





THE AERO L-39 IN AFGHAN SERVICE (I)

By Lukas Muller



The Czechoslovakian-made Aero L-39 training aircraft was widely exported and enjoyed long and successful careers in many countries in the world. Afghanistan received its first Albatrosses in 1977 with the last two examples being withdrawn only in the late 2000s or early 2010s, after at least 30 years of service.

Until the late 1950s, the Royal Afghan Air Force relied upon a collection of rather obsolete piston aircraft, primarily of British origin. After the King Zahir Shah requested aid, including military hardware, from the Soviet Union, the country's air force experienced a period of rapid modernization: it not only received MiG-17 fighter-bombers but also Il-28 bombers and number of other relatively advanced types of airplanes and helicopters. For training purposes, the air force employed Yak-11, Yak-18 and MiG-15UTI two-seaters. However, in mid-1970s, Soviet advisers present in the country saw a need for a new, more advanced training aircraft and recommended deliveries of L-39 Albatross that was becoming the standard jet trainer of Eastern Bloc countries.

The first batch of 12 Albatrosses arrived in Afghanistan in 1977, entering service within the 393rd Training Air Regiment of the Afghan Air Force (the word 'Royal' was dropped after the 1973 coup in which the king was overthrown) based in Mazar-e Sharif. Aircraft delivered in the first batch were finished in a two-tone livery, with upper surfaces in white and lower surfaces in light grey. National insignia consisting of a green-black-red triangle was placed over a white disc and was carried in six positions. Aircraft of the first batch received the serials 001 – 0012.



Barely a year later, in April 1978, the communists within the Afghan military launched a successful coup and established the Democratic Republic of Afghanistan. Almost instantly, anti-communist uprisings initiated by Islamist parties erupted throughout the country: the Afghan civil war had begun, although training of cadets at Mazar-e Sharif airport was not affected by these events. Helped by Soviet instructors, the 393rd Regiment continued operating not only its L-39s but also older MiG-15UTIs and MiG-17s. Among countless changes in political, economic and social life, the communist coup also brought about a replacement of the national insignia: traditional Afghan triangles were over-painted with red roundels with yellow Afghan coat-of-arms.



Guideline Publications



THE AERO L-39 IN AFGHAN SERVICE (2)

By Lukas Muller

Within a year, it was evident that the communist regime was struggling to remain in power. The pressure of Islamist fighters was enormous and the communist army was being plagued by low morale and defections. Being afraid of the collapse of a relatively friendly Afghan regime, leaders in Moscow decided to intervene. In late 1979, Soviet special forces killed the Afghan communist president, the Soviet army invaded the country and a new president of a more moderate communist faction was installed in power. Perhaps not surprisingly, following these events Afghan aircraft including L-39s received a completely new design of roundels consisting of a red star outlined with circles of black, red and green.

As the fighting raged, the Afghan Air Force's strength was bolstered with deliveries of huge numbers of MiG-21s and Su-22s from the Soviet Union, and the need for new crews capable of manning modern fighter jets reached unprecedented levels. Although many aspiring Afghan airmen went to military schools in the USSR, others continued being trained in Afghanistan. Soon, those twelve L-39s delivered in 1977 proved to be too few to fulfil the requirements of the intensified training program and between 1983 and 1984, two additional batches of 6 and 8 Albatrosses arrived in Mazar-e Sharif.



Newly delivered machines received a standard camouflage, consisting of light brown-green and dark brown-green on upper surfaces and light grey on lower surfaces. In the coming years, all serviceable aircraft from the first batch were repainted in a similar fashion. At least one machine from the first batch became unserviceable before being repainted and ended its career at a huge scrapyards outside the country's capital. Serials of aircraft from the second and third batch are a mystery: whilst various Czech sources claim that there never were more than 26 Albatrosses delivered, the highest known serial is 0027, not 0026 which would be more logical given the claimed total number of L-39s in Afghan service. Moreover, a photo of a derelict Albatross taken at Mazar-e Sharif in 2000s indicates that the Afghan Air Force may have received some second-hand L-39s from the Soviet Union: the machine in the photo seems to carry Soviet red stars under the faded-out Afghan national insignia. If true, the total number of Albatrosses serving in Afghanistan could well have been over thirty.

Although the L-39C is able to carry light armament on two weapon pylons, it is not known if Afghan machines ever saw any combat. The Afghan Air Force had hundreds fighter jets and helicopter gunships that were more suitable for ground strikes which means that the Albatrosses probably were only used in their intended role as advanced jet trainers. After the USSR and USA agreed that they cease military aid to all Afghan warring parties, and the USSR dissolved in late 1991, the Afghan communist regime started to crumble. In the first few months of 1992, it not only lost its ability to pay the irregular militias it relied upon to stay in power but also couldn't provide its regular military, including the air force, with adequate resources, and the Afghan Air Force soon had to slow down the pace of operations exacerbated by a lack of fuel.





THE AERO L-39 IN AFGHAN SERVICE (3)

By Lukas Muller



As a result of cessation of military and humanitarian aid from the now non-existing Soviet Union, Afghan communist politicians, military leaders and rank-and-file soldiers became too demoralized to keep the regime functioning and in late April 1992, Islamist parties took over power in the capital and established the Islamic State of Afghanistan. In reality, though, the country was fragmented among several major parties and countless local commanders, and the internationally recognized government only controlled parts of Kabul and several provinces. While the civil war continued, the Afghan Air Force found itself divided among Islamist parties and former communist militia leaders. Northern areas, including the city of Mazar-e Sharif and all local airports came under the control of Uzbek general Abdul Rashid Dostum, whose military continued to operate all remaining L-39C of the 393rd Training Air Regiment.

Dostum's air force replaced the communist regime's red star insignia with the traditional pre-1978 triangle roundel but didn't change the serials or camouflage colours. It's possible that the training of new jet pilots continued at Mazar-e Sharif air base but it's not known to what extent. All 'private' air forces of the Afghan warring parties suffered from a lack of resources and overall mismanagement and although Dostum's military was relatively well-staffed and well-equipped, training of new pilots might not have been a priority, especially when there were enough skilled ex-communist air force pilots available.

According to Afghan sources, in the first half of the 1990s Dostum exchanged several of his L-39s for a small batch of Su-17 fighter bombers from the Republic of Uzbekistan. Nothing concrete is known about this deal but Dostum apparently needed combat aircraft more than trainers that couldn't be tasked with, for example, bombing missions against the government targets in the capital.

While Dostum's northern provinces were relatively stable and peaceful, rest of the country suffered from bitter civil war. In the autumn of 1994, the Taliban movement conquered the major southern city of Kandahar and in autumn 1996, it evicted the internationally-recognized government from Kabul. After these events, General Dostum allied with the ousted government and started an anti-Taliban campaign that lasted till May 1997 when one of Dostum's commanders, General Abdul Malik Pahlawan, made an alliance with the Taliban, turned against Dostum and forced him into exile. As a result, basically the whole of Dostum's military, including the air force, went under Malik's command. However, General Malik soon felt betrayed by the Taliban who had promised him a high-ranking position within their government but eventually failed to keep their word. In a matter of a few days, Malik turned against the Taliban and the whole northern Afghanistan became engulfed in multiple battles between the radical Islamic movement and Malik's Uzbek forces. In a bid to save his aircraft from being captured by the Taliban, General Malik ordered his remaining pilots to evacuate their aircraft to Tajikistan. Available reports indicate that several L-39s indeed landed at the Tajik base of Kulob, while the rest of the fleet was captured by the Taliban and transferred to their main air base outside Kandahar when the Taliban overrun northern provinces in summer 1998. Photographs taken probably in 2000, show four Taliban Albatrosses parked on the tarmac at Kandahar airport which means that the radical Islamic movement might have resumed training of new pilots or at least used its L-39s for refreshment flights of ex-communist air force pilots who had joined the movement after long breaks in flying. It's possible that several more L-39s continued to be operated by the Taliban at Mazar-e Sharif, and other air bases that the movement had captured, but no details are available in this regard.





THE AERO L-39 IN AFGHAN SERVICE (4)

By Lukas Muller



Russian sources claim that a Taliban pilot defected with his L-39 to Tajikistan in August 2000 but this information remains unverified: according to the sources, the serial number of the aircraft in question should have been 239 but this is inconsistent with the range received by Afghan Albatrosses.

After the terrorist attacks in New York and Washington on 11 September 2001, the US and British forces intervened militarily in Afghanistan and in a matter of a few months – and with extensive help of anti-Taliban opposition forces on the ground – routed the Taliban movement and established a new internationally-recognized government of Afghanistan. During US and British aerial attacks in October 2001, virtually all Taliban aircraft, including the Albatrosses based at Kandahar airport, were destroyed. However, the saga of Afghan L-39s continued: several months after the fall of the Taliban, three operational L-39s were photographed at the Sheberghan air base in northern Afghanistan. It's not known, though, if the machines in question survived the allied attacks while parked at the base or if they were among those few jets that had been evacuated to Tajikistan before the Taliban conquered the northern provinces and that their pilots returned back home after the fall of the Taliban government in 2001. Regardless of their previous story, those three operational Albatrosses were later flown from Sheberghan to Kabul, and put under the command of the Afghan National Army Air Corps. Two of them (serialled 0021 and 0023) subsequently underwent a complete overhaul in Russia whilst the third one (005) was grounded and served as a source of spare parts. The overhauled machines received a new, two-tone camouflage pattern of green and brown on the upper surfaces and light grey on the lower surfaces. The 'traditional' triangular roundels were applied on six positions. According to various sources, the last two Afghan Albatrosses were occasionally flown by veteran pilots trained in the 1970s and 80s, and were grounded only in late 2000s or early 2010s, mainly because the pilots in question couldn't speak English and weren't able to communicate with foreign air controllers in Kabul. The above-mentioned L-39s aside, the last Afghan Albatross that survived the turmoil of the civil war is a machine serialled 0017 that has been displayed at the Omar Mine Museum in Kabul and, at the time of writing of this article, is still present at the site. Its history is unknown, though.



WANT AFGHAN DECALS?
[Click here for details and how to order](#)

<p style="text-align: center;">AS.6a</p> <p style="text-align: center;">Afghanistan - Early Members - £6.50; Non-Members - £7.50</p>	<p style="text-align: center;">AS.6b</p> <p style="text-align: center;">Afghanistan - Late Members - £6.50; Non-Members - £7.50</p>
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If you'd like to make an L-39, click the image alongside for a complete listing of all kits, in all scales.

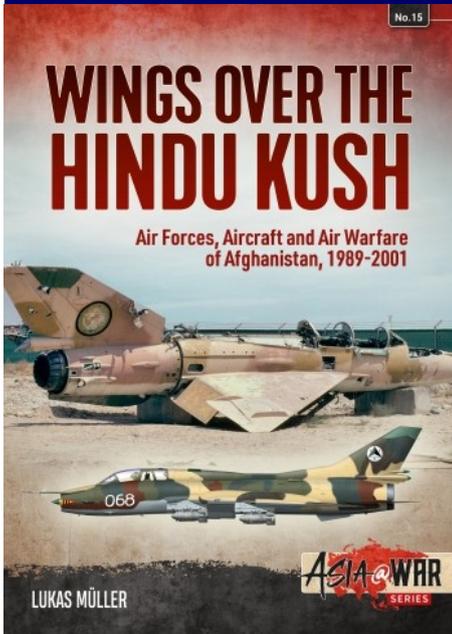
	<p>Evolution L-39 Albatross Limited Edition Eduard 1:48 11121 2018 Changed parts</p>
	<p>Evolution L-39 Albatross with the famous bear rider figure Eduard 1:48 BFC056 2018 Changed parts</p>
	<p>Aero L-39 ZA Albatross MPM Production 1:48 48052 2002 Changed parts</p>
	<p>L-39 Albatross MPM Production 1:48 48048 2001 Changed ???</p>
	<p>Aero L 3920 Albatross MPM Production 1:48 48042 1999 New 680</p>



“ WINGS OVER THE HINDU KUSH”

By Lukas Müller

(Member of Asian Air Arms Research Group)



Afghanistan has long been a country that has fascinated me. Landlocked between Pakistan, Iran, Turkmenistan, Uzbekistan, Tajikistan and China, no country has faced so many years of the ebbing and flowing of military might, and became the epicentre of such titanic struggles as The Great Game, the Soviet occupation, and the ceaseless contesting of Islamic warlords, ISIS and the Taliban. Confusion concerning its recent history has rendered any accurate telling of military aviation very hard to find.

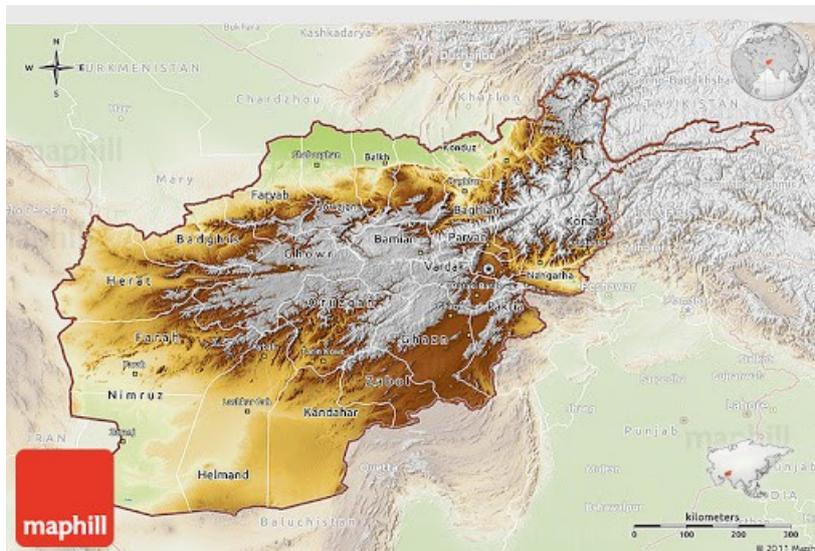
It was, therefore, that I was delighted to get my hands on Lukas Müller's splendid "Wings Over the Hindu Kush—Air Forces, Aircraft and Air Warfare of Afghanistan, 1989-2001". Any understanding of military aviation in such a tumultuous region is going to require a most systematic and thorough recounting of the political background before one can begin to get one's head around the unremittingly chaotic story of Afghan aerial warfare. Müller approaches the subject extremely

methodically making great use of maps and appendices covering such themes as Order of Battle; Defections; and a most comprehensive listing of Aircraft Losses between 1992 and 2001—the vast majority due to ground fire.

In the 88 pages, are to be found nearly 60 photos of aircraft (mostly downed and/or derelict) and military equipment. My favourite images include the up-ended wing of a Su-17 wearing both Afghan and Soviet roundels alongside each other, and an Mi-17, pressed into Taliban service wearing patches of sand, dark brown and green. However, without a doubt, the greatest attraction to modellers and air historians will be the 49 superb colour profiles drawn by Asian Air Arms member Tom Cooper. His illustrations must be among the finest in contemporary aviation publications, but the star of these is unquestionably the most complete depiction of all 29 roundels and markings worn by the warring parties: the majority of which will almost certainly be new to the mass of aviation enthusiasts. (Ed. Asian Air Arms Research Group produces two sheets of Afghan decals, but as a result of this new information, Lukas Müller will be assisting us to produce a third sheet of never-before produced Afghan markings.)

This splendid book offers the reader a most detailed account of not only Afghan politics but also probably the most outstanding narrative of contemporary Afghan military aviation ever published. Highly recommended!

Brian Griffin





MIL MI-24 HIND AND SUB-VARIANTS IN ASIA

Part 2—Afghanistan and Indian Sub-Continent (I)

By Mark Attrill

AFGHANISTAN: Deliveries of the Mil-24 Hind to Afghanistan pre-dates the Soviet invasion, with the first examples supplied to the Afghan Government after the April Revolution of 1978 (known as the Saur Revolution) including two late-production Mi-24A Hind-A and one Mi-24U Hind-C



unarmed trainer version and several Mi-25s (the export version of the Mi-24D Hind-D) to help deal with the Mujahedeen guerillas. The Mi-25s were initially assigned to the 373rd Air Transport Regiment in Kabul although, over time, the Afghan General Staff tried to create independent helicopter units in three of the major provinces. The experiment was not a success since local commanders did not appreciate the need to provide suitable support and maintenance facilities or the tactical value of these new assets, so the plan was abandoned with the return of all of the assets to Kabul to form the 377th Independent Helicopter Regiment. In spite of the difficult command relationships, the Afghan pilots were well-trained and made effective use of the aircraft although at least one aircraft was shot down by guerillas within the first three months.

As the security situation deteriorated the Soviet Union decided to launch an invasion, which commenced in December 1979. The original Afghan Republican Air Force national insignia, a red disc with a stylized yellow design and inscription, which had initially adorned the Afghan Mi-24/25s was short-lived and eventually replaced by the Soviet inspired insignia of the Democratic Republic of Afghanistan Air Force (DRAAF) in 1983,

with a large red star encircled by the Afghan national colours, in recognition of the puppet government's support to the Soviet Union against the Mujahedeen. In each case the markings were applied in three positions on the fuselage sides and lower surfaces. Although the Afghan Mi-24As were initially delivered in a standard scheme this was subsequently adjusted to suit local conditions, with what appeared to be large 'leopard' style patches applied in a Medium Green shade. The Soviet style Bort numbers were

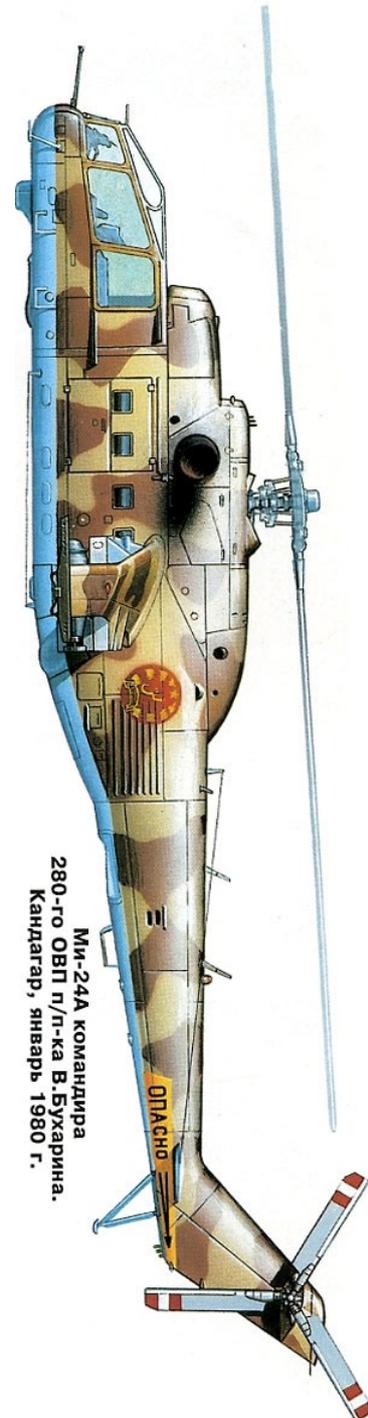
crudely over-painted with the DRAAF roundel applied in three positions and the aircraft were also equipped with the air intake filters that are not normally seen on early model Hinds. The Mi-25s appeared to have been delivered in a 'Middle East' style colour scheme with Olive Drab and Sand upper surfaces, again with the DRAAF roundels applied on the fuselage sides and undersurfaces and with a distinctive style of two-digit aircraft code. The Afghan Air Force continued to operate their Mi-25s and Mi-35s alongside those deployed by the Soviets during the remainder of the 1980s, regularly receiving attrition replacements; given that the Soviets were reported to have over 120 Mi-24s in Afghanistan at any one time this would have enabled them to ensure the more politically acceptable deployment of a joint force for combat operations was maintained throughout the conflict with the various guerilla groups on the opposing side. The joint arrangement was not always successful though and in keeping with other incidents, a number of disaffected DRAAF crews defected to neighbouring Pakistan with their Mi-24s in the mid-1980s. At least two Mi-24D

Hind-Ds and a Mi-24V Hind-E, valuable prizes during the height of the Cold War, were ultimately delivered to the US authorities for evaluation via this route. Later on, at least one more Mi-25 defected to the Jaimat-e-Islami and it is understood this aircraft later served with the NC/UF Air Force. After the departure of Soviet forces from Afghanistan in February 1989, surviving examples of those Mi-25s and Mi-35s that had been delivered directly or passed on to the Soviet-backed Afghan forces during the war remained in Service.

In mid-1993 the surviving Hinds were operated by the 332nd Combat Helicopter Regiment (CHR) in Jurm, the 375th CHR in Mazar-e-Sharif, the 377th CHR 'Heroes of the Revolution' at Kabul-Khwaja Rawash International Airport and an attack helicopter unit at Jalalabad, although this number dwindled during the long civil war that ensued throughout the 1990s. Ex-Afghan Air Force Mi-25/35s, operated by the ascendant Taliban Forces under the banner of the Islamic Emirate of Afghanistan Air Force (IEAAF) gradually became inoperable but a few remained in service with the anti-Taliban Northern Alliance, which continued to receive Russian assistance and access to spares until the Post-911 US-led intervention in Afghanistan in late 2001 and operated the aircraft within the Northern Coalition/United Islamic Front (NC/UF).



Both the Northern Alliance Mi-35s were mothballed for a number of months in 1999/2000, due to a lack of spares but are now back in service again. The Mi-35 pilots, Capt Abdul Nai and Capt Muh Amin are highly experienced.





MIL MI-24 HIND AND SUB-VARIANTS IN ASIA

Part 2—Afghanistan and Indian Sub-Continent (2)

By Mark Attrill



The Northern Alliance Mi-35s were kept safely hidden in the impenetrable Panjshir Valley and were only ever used in extreme circumstances; either supporting major Northern Alliance offensives against the Taliban or defending the strongholds of the Alliance leader, Ahmed Shah

Massoud. These aircraft all retained the original standard Mi-25/35 export colour scheme, which is an approximate match to Medium Green (FS34079) and Light Brown (FS30219) on the upper surfaces with Pale Blue/Grey (approximately FS35526) undersurfaces, although for those in service with the Northern Alliance, these were extremely weathered and faded. The aircraft were adorned with the distinctive Northern Alliance insignia, which originally included a red triangle in the lower portion of the roundel although this seemed to be particularly prone to weathering and often disappeared.

As the International Security Assistance Force (ISAF) mission looked to enhance Afghanistan's ability to rebuild its own security forces in the wake of almost 25 years of occupation and civil war, this included the rebuilding of the nation's air arm and the renamed Afghan National Army Air Force (ANAAF) was established in 2010. With US and International assistance, the ANAAF sought to regain some of its previous attack helicopter capability and started to receive aircraft from a variety of sources, including Russia and Ukraine. In 2008 and 2009, the Czech Republic donated six Mil Mi-24V *Hind-Es* to the Afghan National Army Air Corps (ANAAC) and India then donated four refurbished Mi-35s to the ANAAF in 2015-16. Three years later, India donated the first of four refurbished Mi-24V helicopters, originally purchased from Belarus, to replace the Mi-35s. The ANAAC are currently operating between 8-11 Mi-35s although current plans call for these to be replaced with a mix of rotary wing Hughes MD-530F attack helicopters and fixed wing Embraer A-29 Super Tucanos in ANAAC service.



INDIA: The Indian Air Force received 12 Mi-25 *Hind Ds* in 1984 which entered service with the newly established 125th Helicopter Squadron 'The Gladiators' at Pathankot Air Base, which were later supplemented by a small number of unarmed Mi-25U dual-control trainers. Five years later, deliveries of the more modern Mi-35 *Hind E* commenced which permitted the establishment of a second Helicopter Unit, the 104th 'Pioneer Rotarians' (also known as the 'Firebirds') at Suratgarh Air Base. The Indian Mi-25/35s were all built in Rostov-on-Don and known by the name 'Akbar' in Indian Service. The aircraft were initially operated in a colour scheme similar to that worn by the Afghan Mi-25s, which roughly equated to Medium Green (FS34128) and Sand Yellow (FS33540) on the upper surfaces with a faded Light Blue (FS35414) on the lower surfaces, with roundels in three positions and fin flashes in the national colours.

Indian Air Force Mi-25 *Hinds* were first used in combat operations in 1987, against the Pakistan Army when fighting broke out over the disputed Siachen Glacier region, high up in the Himalayas. In the same year, the Indian Air Force deployed to Sri Lanka as part of the Indian Peace Keeping Force, supporting the Indian and Sri Lankan armed forces in their fight against various Tamil militant groups including the Liberation Tigers of Tamil Eelam (LTTE), and were cited for their highly effective provision of heavy fire support to allied troops. The most notable of these actions were the defence of Jaffna and in Operations Trishul (Trident) and Viraat (Majestic), hitting rebel columns, cutting lines of communication and attacking LTTE boats bringing supplies across the Palk Strait.





MIL MI-24 HIND AND SUB-VARIANTS IN ASIA

Part 2—Afghanistan and Indian Sub-Continent (3)

By Mark Attrill

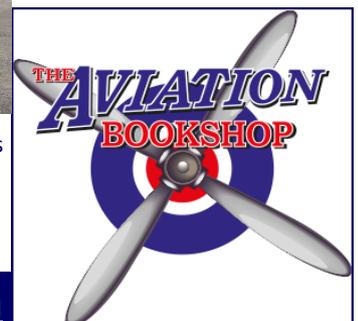


Indian Air Force Hinds were almost certainly involved in renewed conflict with Pakistan over the state of Jammu and Kashmir, known as the Kargil War, during the summer of 1999 during which they would have escorted and supported the IAF Mil Mi-17 *Hips*, which conducted a large scale airlift of troops on border operations. The following year, IAF *Hinds* were, once again, involved in another United Nations Peacekeeping operation when Mi-35Ms deployed to Sierra Leone as part of Operation *Kukri*. In 1998 India signed a contract with Israeli Aircraft Industries' to upgrade 25 Mi-25/35s, which included a comprehensive avionics fit and night attack capability, after which the aircraft, regardless of origin, were all unofficially designated Mi-35E in Indian Service. The aircraft also received a new overall light grey scheme following overhaul.



Pakistan was not, *per se*, an original recipient or operator of the Mil-24 Hind but, as previously related acquired a number of examples as a result of several defections from the DRAAF in Afghanistan during the Soviet occupation. A fully armed Mil

Mi-24D *Hind-D* has been previously observed at Quetta, presumably shortly after a defection and possibly the same aircraft was observed in Pakistan Army Aviation markings as late as November 2003. A second, Mi-24V *Hind-E* variant, was also seen at Quetta showing 'Pakistan Army' and 'Gallants' titles on the fuselage sides and still sporting its original DRAAF style camouflage pattern of Dark Green/Sand Yellow over Light Blue undersurfaces. It has been confirmed that at least two of the *Hinds* were passed to the US authorities in the 1980s for evaluation but it has also been reported that other examples have been used by Pakistan on a small scale against insurgents until they were grounded through a lack of spare parts. In more recent times, the Pakistan Army Aviation Corps is understood to have taken delivery of four Mi-35M *Hind-Fs*, ordered in 2016. These aircraft were believed to have been finally delivered in late 2018 and operated by the 4th Army Aviation Squadron at Quetta Khalid in Balochistan. A follow-on order for another five aircraft was received in late 2018, presumably for delivery in 2020.





MIL MI-24 HIND AND SUB-VARIANTS IN ASIA

Part 2—Afghanistan and Indian Sub-Continent (4)

By Mark Attrill

SRI LANKA began to receive a steady stream of ex-Ukrainian Air Force Mi-24P/V *Hind E/F* and new build Mi-35M Hinds from the mid-1990s in order to prosecute the bitter civil war that was raging with the so-called ‘Tamil Tigers’ guerilla organizations including the Liberation Tigers of Tamil Eelam (LTTE). The aircraft were ostensibly operated by Number 9 Squadron of the Sri Lanka Air Force (SLAF) at Minneriya-Hingurakgoda Air Base although the first aircraft to arrive were initially operated and maintained by Ukrainians. The first operational flights took place in late 1995 although three of the first six aircraft delivered remained in storage until September 1996, presumably because of the lack of crews to fly them. One Mi-24P *Hind E* was shot down in March 1997 and the SLAF lost two more during the same year.



Sri Lanka has recently looked towards Elbit Systems to provide its Mi-35Ps with a much needed night capability and to boost its self-defence systems. SEE-ALSO: WINDS



In March 1998, the SLAF ordered three new-build Mi-35 Hinds (a Mi-35 *Hind-E* and two Mi-35P *Hind-Fs*) from the Rostvertol factory in Rostov-on-Don to make up for the combat losses and another two Mi-35Ps were added to the inventory in 1999. As combat losses mounted, the SLAF continued to order small batches of attrition replacements of both Mi-35s from Russia and Mi-24Ps from the Ukrainian aircraft repair company, Aviakon based in Konotop. At least one SLAF *Hind* was shot down in 1999 and another

three Mi-24Vs were lost in 2000. In all, total deliveries to the SLAF appear to number twenty-six, which includes eleven Mi-24V/Mi-35s and thirteen Mi-24P/Mi-35Ps. The early deliveries also included two examples of the rarer Mi-24RchR *Hind-G2* variant that had been originally optimized for NBC reconnaissance and had first been noted by NATO observers during the Chernobyl nuclear disaster in 1986. These aircraft were stripped of this specialist equipment before delivery and re-configured as Mi-24Vs to undertake attack helicopter duties in Sri Lanka.

At least five Sri Lankan Mi-24s were lost to LTTE MANPADS during the twelve-year civil war between 1987-2009, with several more lost in attacks on air bases although one was later returned to service after repair. The majority of the early aircraft were delivered in the standard Soviet style camouflage scheme with the Ukrainian national insignia and Bort numbers hastily painted over with medium grey patches. At this time the aircraft were almost totally devoid of markings with the exception of new 5-digit serial codes/numbers on the tailboom. At least one Mi-35P aircraft was also finished in Gloss Green and Grey camouflage scheme with bright Blue undersides. In time, and following overhaul, aircraft emerged in a new Medium Green and Sandy Grey Brown wraparound colour scheme and under a SLAF post-2009 renumbering system the surviving Mi-24/Mi-35 *Hinds* received 7-digit codes, with roundels and fin flashes applied in the national colours. Black serial numbers were applied to the tailboom with ‘Sri Lanka Air Force’ titles, also in black, applied to the fuselage sides, adjacent to the engine access doors. Since the cessation of hostilities, surviving aircraft have been upgraded with a modern Israeli FLIR and electronic warfare system with five receiving further equipment, including radar, a target tracking system and Air to Air Missiles to intercept aircraft.



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Dassault Rafale Latest Recruit to the Indian Air Force

By David Thomas



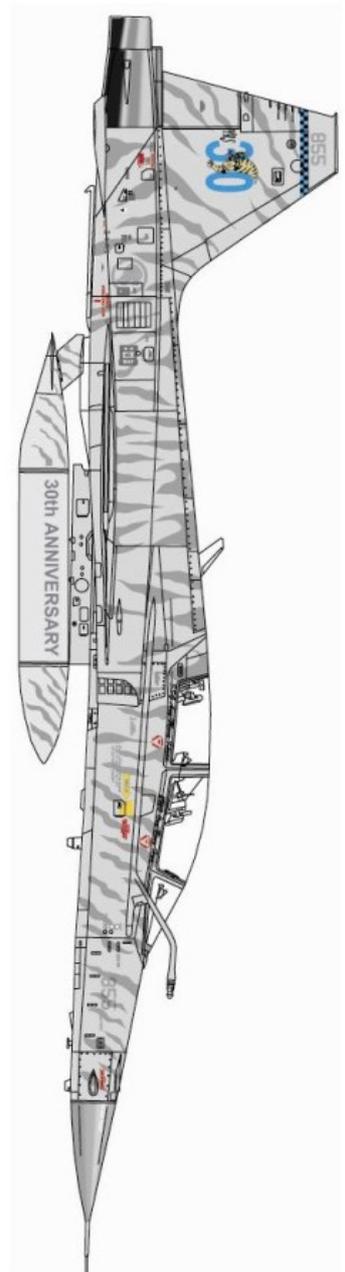
Rafales for India

The original order for Rafales was placed in January 2012 when the Indians requested 126 aircraft with an option to acquire a further 63 later. The overall cost was said to be worth about \$30 billion with each aircraft costing around \$120m each. However, the resulting negotiations were to prove difficult and in April 2015 the Indian Prime Minister indicated they were now only going to buy 36 jets and in July that year the original request for 126 machines was withdrawn.

The new deal saw the unit price reduced to \$91m for the single seater (28 aircraft) and \$94 m for the twin seater (8 machines). In addition the Indians were to pay for a number of enhancements to the aircraft the details of these are however outside the scope of this brief article but information about them is widely available on the internet.

Since 2015 the order has progressed smoothly in France and the first aircraft, RB001, a two seater, was handed over in October 2019. Initially the first four aircraft were to fly out to India in May 2020 but this has been delayed and they will now depart in July.

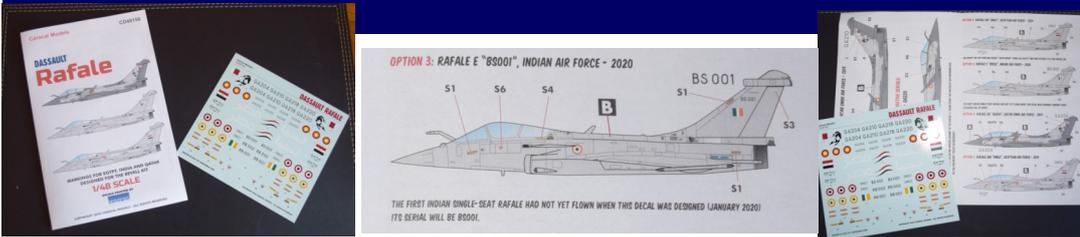
Finally, its worth noting that the order for the Rafales was challenged in the Indian courts on grounds of favouritism and corruption but ultimately these charges were rejected in November 2019. Should anyone wish to follow up on this very brief background to the acquisition of the Rafale I refer you to a lengthy report on this subject on the Wikipedia website.





1/48 Dassault Rafale—IAF Decal Review—Caracal CD48-156

By David Thomas



The Decals

I have been a fan of the work of Texas based Caracal Models and the decals they produce since the first sheet I bought several years ago. They have previously published a number of sheets with Asian Air force connections in both 48th and 72nd scales but I was particularly drawn to the recent arrival of sheet CD 48156 when I saw it included markings for both the single (C model) and two seat (B type) just entering service with the Indian Air Force.

I have built a number of Revell's excellent Rafale kits in the past, in both French Navy and Air Force schemes and have been looking forward to the chance to build one of the first machines ordered for an Asian air arm.

The actual decal sheet is quite small but it does include the possibility to produce either a single or twin seat Indian aircraft, and similar machines for both Egypt and Qatar. One set of national marking for each of the three countries is provided as well as serial numbers and some basic stencilling but if you intended using all of the decal sheet then you will need to make use of the kit decals.

The quality of the decals is high, being printed by Cartograf in Italy and I can say that they go on the model with no problems. My only issue with the Indian roundels is that it may be that the orange ring of the roundel is too pale. Looking at photos of current Indian aircraft the Air Force machines carry roundels with a much more deeper, almost red, toned ring and this is true of the roundel shown on the photos of the new Rafales I have found on the net. The Indian Navy seems to favour the orange ring but not the Air Force. This may be just my interpretation of colours on photographs and we all know how that can be a problem. However, I would be grateful if there is anyone who can clarify the matter. I would be delighted to hear because my next Indian project is an Su-30 MKI

One final thing to be aware of concerns the colour reference given on the instruction sheet. Caracal suggest that Indian Rafales are painted Compass Grey 36320 overall and I note that several other decal manufacturers say the same. For myself, 36320 seems too dark to represent the colour I have seen on French machines and I now use a home brewed mixture using Tamiya Medium Sea Grey and Sky Grey in roughly the proportions of 75% MSG to 25% SG. I say roughly because I do tend to vary the proportions to take account of individual wear and tear on the airframe but as the Indian aircraft are brand new I stuck rigidly to the 3:1 formula.

Interestingly on this subject, I note that French decal manufacturer, Syhart, refers to the Rafale scheme being the French equivalent of FS 26293, which they refer to as Satin Air Superiority Medium Grey and give the following possible paint mixes;

- Humbrol; 75% 126 + 25% 128.
- Gunze; 75% H306 + 25% H307
- Testors 75% 1725 + 25% 1741

I leave the final decision in your hands, I think I am happy with my own solution and you perhaps can gauge something about its accuracy from the accompanying photos of the finished model.

In conclusion I must say the decals are well up to the standard we have come to expect from both Caracal and Cartograf and for anyone wishing to produce any of the export Rafales they are, currently, the only game in town. I would happily recommend them with the proviso that, as always, you do your own research before completing your model.

David Thomas



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CANBERRAS AND B-57s IN ASIA PART 3—TAIWAN (I) By John Sheehan and Kevin Delve



TAIWAN

Another clandestine user of the Canberra was Taiwan. Similarly to the PEE WEE programme in Pakistan, Canberras were flown and maintained by Taiwanese crews, though working very much for Uncle Sam.

The story of the RoCAF's Canberra operations starts with a cooperative agreement between the US and Government of Taiwan in 1956 to jointly gather aerial reconnaissance of mainland China. The first Canberra model operated by the RoCAF was the RB.57A, (at the time the RB.57A, like its RAF counterparts the PR.3 and later PR.7 were all but immune from interception from the current fighter aircraft operated by the Warsaw Pact countries and their allies). As with all military technology things don't stay still for long: this was the case with the Canberra and, with the introduction of the Mig.17, its former altitude advantage over the Warsaw Pact adversaries declined markedly and the Canberra was now vulnerable to interception and destruction. To counter this, the USAF and Martin set about a program of modifications to the base model RB.57A: these works were carried out under Project Heart Throb.

Ten A model Canberras were selected for the conversion to RB.57A-1, the work involved removal of the rotary bomb bay door and associated equipment (the area was skinned over with a light alloy skin); the next thing to go was the navigator, along with the ejector seat and the navigation and photographic operation equipment from the rear cockpit; and a new panel was added to the right hand side of the cockpit allowing the pilot to operate the cameras. The engines were replaced with a more powerful version of the J.65 the J.65-7 increasing the thrust from 7,200 lb to 7,800 lb. With the loss of the navigator the job of finding the target, then photographing it, fell to the pilot alone: to this end, a downward-pointing periscope/photo sight head was fitted, this afforded the pilot a narrow but essential view of the ground below. To further reduce weight, the transparent nose cap was replaced with a spun aluminium replacement. All these weight-saving modifications removed around 5,600 lb allowing the 'Dash One' Heart Throb RB57As to reach an operational ceiling of around 55,000 (around 6,000ft over the standard RB.57A's 49,000 ft), along with an increase in range. These ten Dash One aircraft were split between operations over Europe and the Far East, the aircraft were split 6 for Europe, 4 for the Far East.

In the autumn of 1957 a group of specially selected RoCAF air and ground crew was sent to the USA for intensive ground school and flight training. Two Heart Throb Canberras 52-1427 (RoCAF 5641) 52-1431 (RoCAF 5642) were delivered to the RoCAF air force in early 1958. A typical mission would start with a proposal coming from the Americans; the RoCAF would formulate a detailed flight plan for the mission; each flight would be assigned two pilots (one was held in reserve should the prime pilot become ill); each pilot would form their own flight plan, then the two would be compared to decide which would be best. The RoCAF were configured for daylight photography only, each aircraft had a suite of cameras consisting of a T-11 mapping camera and two K-38s, arranged as a split vertical pair. All the cameras were housed in an air-conditioned compartment to the rear of what would be the bomb bay on the standard B.57. The post mission film was processed by the RoCAF Tactical Photography Squadron; a duplicate of the film was made at the same time and flown to Japan for the USAF to analyse. The intelligence gathered from the two analyses would be compared to form a report. It wasn't too long before the altitude advantage was lost - on February 18th 1958 on a mission to photograph Shan Tung peninsula, Captain Chao flying 5642 was intercepted (guided by ground-based radar) by two Chinese Navy J-5As. Stills from the J-5s' gun cameras suggest Captain Chao's Canberra was hit by cannon fire on the port wing and engine. The Canberra crashed into the Yellow Sea near the town of Chingtao, Captain Chao did not eject and was lost with the aircraft.

Following this shooting-down, over-flights by RB.57As were stopped, the remaining RB57A -1 was returned to the USA via Japan. Only four over flights were achieved by the RB.57As.

- 1st mission Lt. Col. Lu, December 6th 1957
- 2nd mission Captain Chang, December 15th 1957
- 3rd mission Captain Lin, January 7th 1958
- 4th mission Captain Chao February 18th 1958

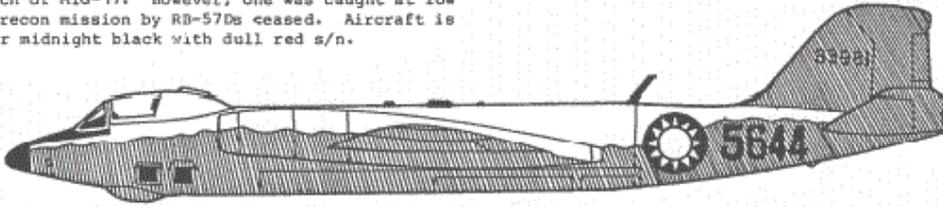




CANBERRAS AND B-57s IN ASIA PART 3—TAIWAN (2) By John Sheehan and Kevin Delve

4. RB-57D. Three of these aircraft were based at Taoyuan AFB on Taiwan from 1958 to 1963. They normally flew low after take-off to avoid enemy radar, but prior to reaching the target they would rise to an altitude beyond reach of MiG-17. However, one was caught at low level and recon mission by RB-57Ds ceased. Aircraft is silver over midnight black with dull red s/n.

Image: SAFO April 1984



The story of the RB.57D runs parallel with that of the U.2. The USAF had realised that the Soviet block and its allies were fast catching up with jet technology, and aircraft with much better altitude performance would be needed to keep ahead in the strategic reconnaissance race. To this end a request was put out for companies to submit designs for an aircraft capable of reaching altitudes up to 70,000 ft. Lockheed's U.2 was the front runner for this role, Martin had proposed a 'stop gap' development of the RB.57A in a joint venture with General Dynamics at Fort Worth under the umbrella of Project Big Safari. (Big Safari was a government program which allowed companies to develop new reconnaissance aircraft with minimal red tape and with all possible assistance to expedite new designs.) The RB.57D was to be based on the B model Martin Canberra with the new tandem cockpit arrangement.

The main visual difference between the standard B.57B and the RB.57D was a much bigger wing span and larger engines. The span was increased from 64 ft. on the standard Canberra to 106 ft. on the D, the engines were changed from the 7,200 lb thrust Wright J.65, to the Pratt and Whitney J.57-P-37 with 10,500 lb. The fuselage was modified to carry a crew of one, with a similar set up to the Heart Throb RB.57A but this time it was designed from the outset to be operated this way. The photographic equipment was moved from the rear fuselage to a re-designed compartment under the pilot's position in the nose. To quote the RB.57D Technical manual, the equipment was, '*optimised for daylight high altitude coverage of terrain and for recording pertinent flight data such as time of flight, altitude etc. The basic components of the system are two Type-38 (or KA-1) camera's two KC-1 cameras, a viewfinder and the necessary controls and indicators. The camera compartment is directly aft of the pilot's seat, the viewfinder is in the forward nose section, and all indicators and controls are within the pilot's compartment. The compartment is air-conditioned during flight and while on the ground. A defogging system services the three camera windows. During normal operations a picture is taken by both K-38 (orK-1) cameras each time a pulse is relayed from the viewfinder. A picture is taken by both KC-1 cameras on the first of every pulse from the viewfinder. An extra-picture switch allows the taking of additional pictures without interrupting the normal operations of the camera system.*' The area that would have been the bomb bay on the B.57B was skinned over, the two fuel tanks in the crown of the centre were removed along with all associated structures and plumbing, all the fuel was now carried in the new wing. Also removed were the two speed brake doors from the rear fuselage. All this weight saving meant that the RB.57D was only approximately 4,600lb heavier than the Heart Throb RB.57SA. It was two of this version of the RB.57D group A that the RoCAF received 53-3978 (5643) and 53-3981 (5644) in October 1958. The crews quickly settled in to the new aircraft with over-flights on mainland China recommencing quickly. The new bigger wing and engines gave the RB.57D a service ceiling of between 60,000 and 65,000 ft., well out of the reach of even the newer Mig 19s. The over-flights continued, even getting as far inland as Peking! These incursions continued with virtual impunity - the Chinese tried to intercept the high-flying intruders every time but without success. However, things were changing - the Soviet military had a new and deadly weapon in the arsenal, the two-stage SA-2 Guided surface to air missile. The effectiveness of this new deadly opponent brought things to an end after 21 unopposed flights. On October 7th 1959 1st Lt. Wang was tasked to carry out a survey of the north-eastern part of the area around Peking, flying 5643. Unbeknownst to him he was picked up by Chinese radar soon after crossing the coast near the WenLing area and tracked as he headed for his target. As he approached the Peking area, around mid-day, he was then picked up by the SA-2 fire control radar of the air defence batteries that defended the Chinese capitol. Three SA-2s were fired at the RB.57D which was shot down with the loss of Lt. Wang. Unfortunately the RB.57D like the RB.57A had no radar warning system which in retrospect seems like a glaring omission!

Two more flights were conducted, bringing the total to 25 for the RB.57D but after a review of operations between the USAF and the RoCAF it was decided to halt all further over flights by Canberras.

John Sheehan and Kevin Delve



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1/48 JASDF F-104J/DJ Starfighter Decal Review—Fundekals



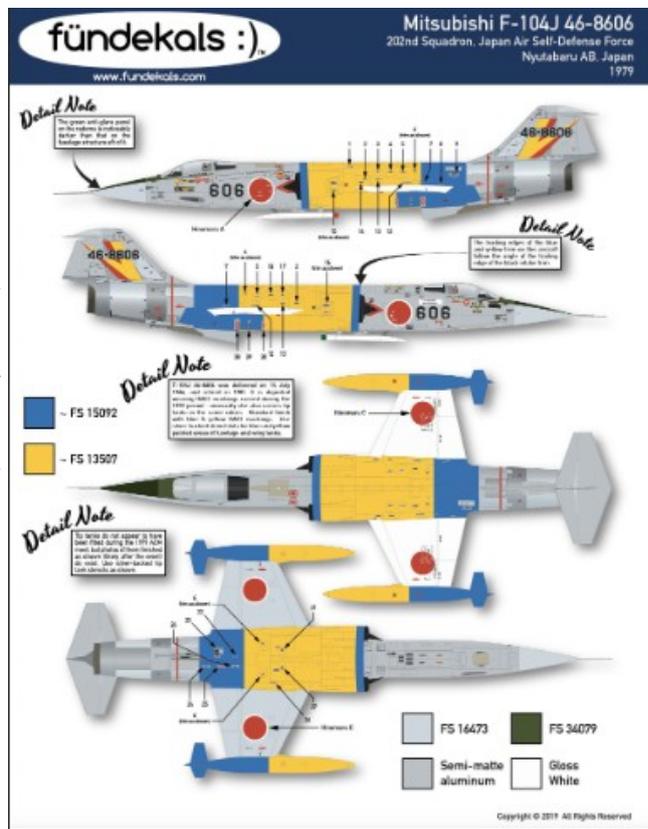
The latest Fundekals 1:48 scale release (which is also now available in 1:32 scale too) will delight fans of the Lockheed F-104 Starfighter in JASDF service and has been superbly timed to provide even more options for the recently released Eduard (Hasegawa) or Kinetic 1:48 scale kits or the Italeri kit in the larger scale. Prospective buyers will be pleased to know that **SIG members Andy Binks and Akira Watanabe** were both involved in supporting Fundekals with the production of these sheets so their attention to detail and accuracy are assured. This very comprehensive decal release includes markings for no less than 16 different aircraft and covers all of the operational Squadrons and the Air Proving Wing that were equipped with the F-104J 'Eiko'. I dare say that with some juggling of the individual serials other F-104J and even some of the two-seat F-104DJs could be reproduced from this sheet even though none of the latter variants are specifically covered in the decal placement instructions.

There is an excellent mix of options included, balancing aircraft operated in the standard JASDF schemes/markings with those that sported the highly colourful markings or

colour schemes associated with Dissimilar Air Combat Training (DACT) during the annual Tactical Air Meets in the late 1970s and 1980s. Three options cover the multi-coloured fuselage bands with no less than five sporting the trial camouflage schemes together with the welcome inclusion of one of the more unusual UF-104J pilot-capable drone aircraft operated in the 1990s. Fundekals take a slightly different approach to that of other aftermarket decal manufacturers in that they provide the decal sheet only, which allows them to reduce costs by the buyer downloading the decal placement instructions from their website. I find that US decal manufacturers take quite different approaches to the amount of information they provide in their respective instructions sheets and these can range from the sublime to the ridiculous !

The Fundekals instruction sheets are quite comprehensive in that they provide a very nice four-view colour diagram for each subject with some individual detail notes and an FS-based paint chart, although in many cases these are approximations only since the JASDF used their own paint system for camouflaged aircraft. The instructions also include a page on general finish details, which provides some extremely useful information associated, in particular, with those aircraft finished in the various shades of natural metal and this can equally apply to Starfighters operated by other air arms. The decal sheet, which has been printed by Cartograf of Italy, is top quality although it should be noted that it only includes the individual Unit markings, serial numbers and special-to-type markings for each option including the rather unusual stencilling applied to two of the special schemes in the kit. Fundekals do produce a separate F-104J/DJ Starfighter National Marking/Stencil sheet that includes enough decals to finish a single or two-seat JASDF Starfighter although both the recent Eduard and Kinetic kits include superb Cartograf printed decal sheets to complement the Fundekals sheet reviewed here, without compromising on overall quality.

Mark ATTRILL





1/144 Boeing C-17 Globemaster II Decal Review—Fundekals

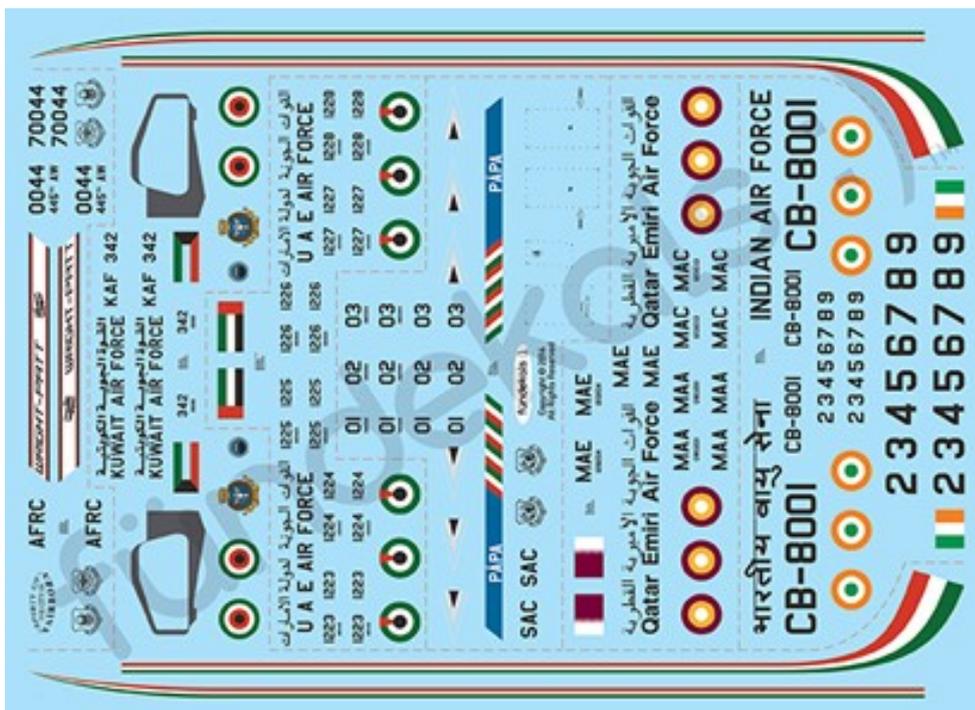


The second sheet reviewed here covers the Boeing C-17A Globemaster III in worldwide service and is designed to compliment the now hard-to-find Revell 1:144 scale kit of the C-17A. The decal sheet, which is printed to the same exacting standards as the F-104J sheet, includes markings for several foreign operators including the Indian Air Force. As with their other releases the decal placement instructions are downloaded from their website and offer useful three-views for each option. The Indian Air Force options includes national markings, dual-language titles and serial numbers for the first nine aircraft in IAF Service although, once again, all standard airframe markings will need to be sourced from the Revell kit. For those who have an interest in the Boeing C-17A beyond its operation by the Indian Air Force, the decal sheet also includes markings for a very attractive Kuwaiti Air Force aircraft sporting an airline style Grey and White colour scheme, and standard low-visibility examples operated by the United Arab Emirates, Qatar Emiri Air Force, NATO (Hungarian insignia) and one USAF AFRC machine.

I purchased my examples direct from the manufacturer, who provides a very quick and efficient worldwide service, including regular updates on the status and despatch of your order.

Once again, thoroughly recommended for those with an interest in the subjects.

Mark ATTRILL

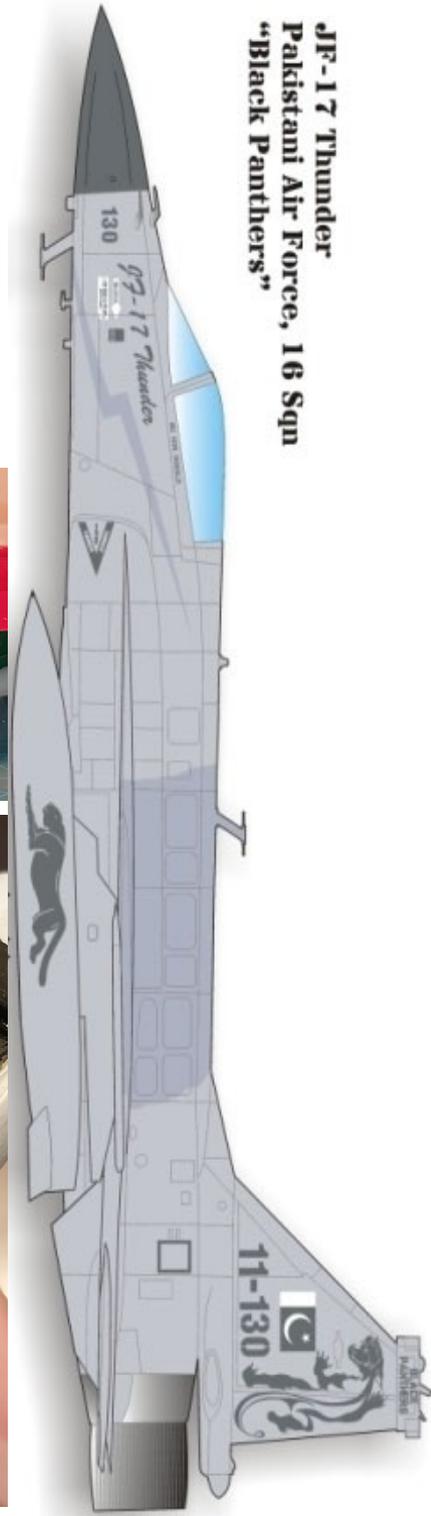
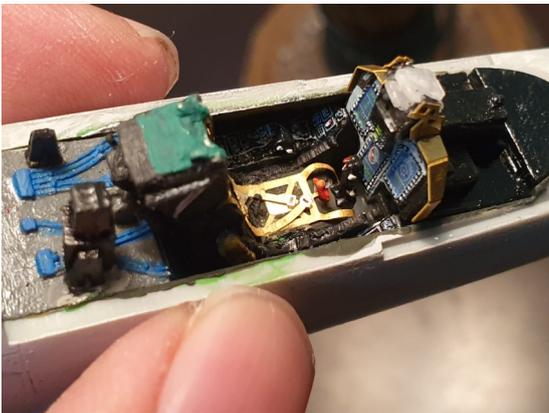




MEMBERS' MODELLING

Trumpeter 1/48 JF-17/FC-1

Modelled by Hafiz Abdullah





North American B-25s in the Netherlands East Indies AF—Part 5 B-25 Transport and Trainers

By Max Schep

Image 1

The N5-134 "Popeye" in 1945 in the far background in a hangar in Canberra still wears its war colours OD/NG. This B-25C was one of the two aircraft in September 1943 selected for a second NEI bomber squadron (119 Sqdn). The plan proved impracticable and as a result the aircraft were handed over to the Aircraft Pool Canberra, after which they were converted for transport assignments. **Collection Ward**



Image 2

N5-143 was damaged in October 1943, as a result this "Strafer" (see Newsletter 2) was transformed for a second time —this time to a transport, used by the Pool in Canberra. In 1944 TB-25s N5-128, -129, -134, -142 and N5-143 were concentrated in the Netherlands East Indies Transport Section in Melbourne/Brisbane. In the same year the transport aircraft got VH-radio call signs such as VHRDF on the tailplane and rudder of this aircraft. **Collection Vis.**

Image 3

The Canberra Pool, which became the Personnel and Equipment Pool (NEI PEP), was responsible for the training of crew members. They could use newly-arrived aircraft from the USA but in November 1944 introduced N5-172 as an operational trainer. It can be seen in the distance, stripped of its camouflage and shining in bare metal, with red white and blue flags in 6 positions. **Collection Casius.**



Image 4

N5-264 (the second-to-last delivered B-25) arrived in Canberra on July 1945 and, after VJ Day, deployed to serve with "Rescued Allied Prisoners of War and Internees (RAPWI)" operations in the Netherlands Indies. It was disarmed, with its turret removed and stripped of all unnecessary parts for the task. The camouflage had not been completely removed, as it was still visible on and above the wing. Here it's shown with the name on the nose "I Shall Overcome", in combination with an early squadron designation of 18 Squadron. **Collection National Archives.**

Image 5

After VJ-Day, South East Asia Command banned the Netherlands East Indies military from flying over Java and Sumatra equipped with armaments. Several of the B-25s of 18 Squadron (which was based at Balikpapan Borneo), had all armaments temporarily removed, as can be seen on the B-25J N5-257 photographed here at one of the outer airfields of the archipelago, probably Laha Ambon. **Collection Casius**





North American B-25s in the Netherlands East Indies AF—Part 5 B-25 Transport and Trainers

By Max Schep

Image 6

Here is an image of the famous B-25C “Donald Duck” (Newsletter 2) of 18 Squadron, which was converted to a TB-25 in January 1944. It went to the Netherlands East Indies Transport Section in Melbourne/Brisbane and after VJ-Day became a training aircraft at the Overgangsopleidingsschool (OOS) (Transitional Training School) at BIAK Isle. TB-25 N5-128 “Donald Duck” VH-RDA is shown here in a bare metal finish at PEP Bundaberg, Australia with some ex-POWs. The lower parts of the nose glazing have been replaced by aluminium.

Photo Maassen



Image 7

In 1945 Andir Air Base near Bandung was transformed from the technical service for RAPWI Air to the technical department for the Netherlands East Indies Air Force. All major service and modifications on the aircraft were done there. They started to transform the noses of B-25 aircraft to be used for transport duties. The typical glass nose became an aluminium one as seen on the transformed B-25C N5-138 ex VH-RDE. Collection vd Berg

Image 8

It was not only the nose that was modified, the turret was deleted and covered with aluminium, and the tail beautifully re-shaped with aluminium, as seen here on M-447 (previously TB-25J N5-247), photographed at Andir after a trip for the radio school. These changes were also to be seen on M-439, which became one of the SB-25s of 18 Squadron before the aircraft was transferred to AURIS no. 1 Sqn.

Photo Bolte

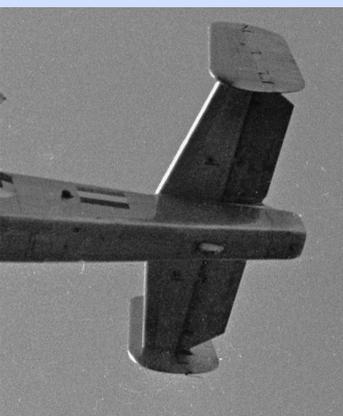


Image 9

This shows the most common tail modification (on B-25J N5-240, seen here as a BB-25, later becoming a SB-25). In this situation there was only a correction with aluminium of the vertical part of the tail. This aircraft was the only B-25 which flew with a black cockpit finish.

Collection National Archives

Image 10

BB-25J N5-221, “Ukkie” (later M-421) of 16 Squadron in Sumatra shows a tail modification in which the whole tail gun position was deleted and transformed with aluminium, just as with the turret. The portside of the aircraft is seen in Newsletter 5 (Image 4b). Collection National Archives



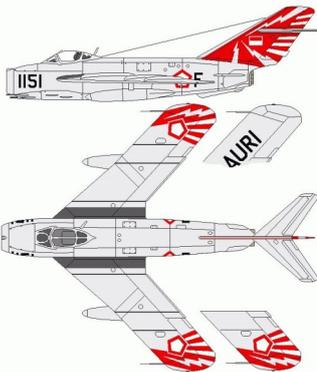
•M.T.A. Schep 22 August 2020



AEROBATIC TEAMS OF INDONESIA

By Mick Burton

Indonesia has had a fairly long tradition of aerobatic teams within its air force, as the first was formed in the 1950s. The unnamed team flew a small number of North American P-51D Mustangs from Number 3 Squadron (Fig.1, note the tall Cavalier-style tail) decorated with an impressive shark teeth design.



They were replaced by Mikoyan MiG-17F "Fresco-Cs" in 1962. Although they lost the sharkmouths, the aircraft did carry a striking scheme of red over the basic metal finish (Fig.2).

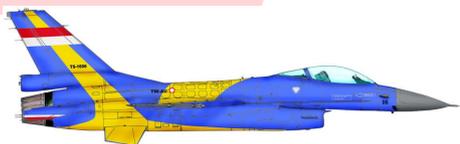


The third subject to flown as an aerobatic mount was the Commonwealth Sabre Mk.32 in 1978, when 14 Squadron formed a team which was named "Spirit 78" (Fig.3).

Following on in 1985 was "Spirit 85" flying Hawker-Siddeley Hawk T.53s (Figs.4 and 5), although no specific scheme appears to have been used, for they carried the then-current jet trainer colours of white, grey and red with yellow trim. There appears to be no record of the displays that these teams performed while in their heyday.



In 1995 the "Elang Biru" ("Blue Eagle") display team was enabled from 3 Squadron again, this time their mounts being six fully operational General Dynamics F-16A Falcons. The team performed its first display on 5th October for the 50th anniversary celebrations of the Indonesian Armed Forces, but it wasn't until the end of the year that the aircraft received a unique colour scheme of blue and yellow (Figs.6,7 & 8).



The aircraft were equipped with "Smokewinder" pods on the wingtip missile rails to generate red and white smoke. "Elang Biru" performed its overseas debut in 1996 at the Singapore Airshow, and was disbanded in 2000 as a result of the world financial crisis. The aircraft were TS-1606, TS-1607, TS-1608, TS-1609, TS-1610, TS-1611 and TS-1612. Sadly, TS-1607 was lost when it crashed whilst landing in bad weather at Halim AFB on 10th March 1997 killing the pilot, Captain Dwi Sasongko. YouTube has a video of the team in action during the 1996 Indonesian Airshow.



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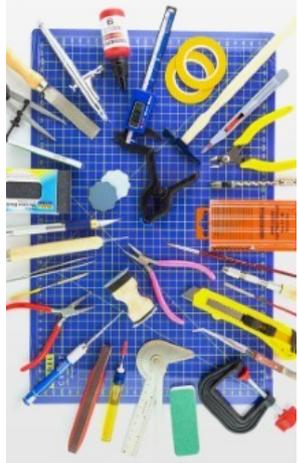
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AEROBATIC TEAMS OF INDONESIA

By Mick Burton

In 2001 Indonesia became unique in the world when "Jupiter Blue" was formed using three different aircraft in the same team. It must have been a real headache for the display designers to accommodate routines that catered for two F-16As, three Hawk T.53s and a single Hawk T.109! No specific colour scheme was applied, the aircraft being flown in their operational camouflage (Fig.9). All the aircraft could produce white smoke, with the Hawks being adapted for both red and blue. After a fatal mid-air collision on 28th March 2002 near Iswahyudi AFB, involving two Hawk T.53s (TT-5310 and TT-5311), the team was disbanded.



The current (2020) TNI-AU aerobatic team incarnation is "The Jupiters". Using six KAI KT-1B Woong Bee jet trainers flown by instructors from 102 Squadron at Adistutipto AFB, Yogyakarta, they are painted in a striking red and white colour scheme (Fig.10), with a team number recently being added to the fin in white; the name derives from the Jupiter call sign of the TNI-AU's instructors.



MODELLING TNI-AU AEROBATIC TEAM AIRCRAFT

With the exception of the KT-1B all the aircraft are available in kit form in both 72nd and 48th scales, although the Sabre will require a conversion. Transfers can be sourced from Model Alliance for the Spirit 78 Hawk (Fig.11), [Dutch Decal](#) for the P-51 (Fig.12), and [Dekl's Australis](#) for the Sabre (Figs.13 & 14).

Mick Burton





CONVERTING HASEGAWA'S 1/48 SEPECAT JAGUAR T.2 INTO AN INDIAN AIR FORCE JAGUAR IB (I)

By David Connolly



References were found in online photos, unfortunately none with dates or unit details. Due to lack of such detailed reference, I am sure my mode is not an accurate representation of a particular aircraft, but it may represent a stage in the life of one! For example, I found photos of some 2-seaters with an external refuelling probe mounted on the nose, and twin strakes under the nose, and this may be a later stage of development. Hasegawa originally released this kit in 1984 alongside the single-seat GR.1 kit. I was pleasantly surprised to rediscover mostly snugly fitting parts in a kit of that vintage. The 2-seater kit provides the 2 wing-mounted external fuel tanks, so common to

Jaguar fit-out, that are not offered in the GR.1 kit. However, the 2-seater kit does not have the fin with the RWR scabbed on. My first task was to add the RWR bits to the fin using styrene strip, while removing the existing antenna on each side of the fin, and restoring the rudder hinge line (Photo 1).

The RWR has forward and rear facing sensors of some kind, and these were added using the rounded end of styrene rods, cut very small (Photo 2). An additional sensor would later be added to each side of the RWR fitting.



Next, styrene stripe was cut and shaped to represent the chaff and flare dispensers installed under the rear fuselage (Photo 3).



The cockpit parts were painted a mid-grey and Pledge was used to gloss the instrument panel and consoles before applying the cockpit decals. The kit seats were not used. Pavla resin seats were painted for later installation. Major parts were then assembled around the cockpit. After filling and sanding seam lines, the first coat of Barley Grey was airbrushed. I had run out of my preferred Xtracolour zinc chromate paint, so I mixed MIG Zinc Chromate internal Green with AK Zinc Chromate yellow to achieve a replacement. My reference photos did not show the colour used by the IAF, so I went with the RAF standard for Jaguar wheel wells and u/c door interiors. I may have got the inside of the airbrakes wrong! (Photo 4).



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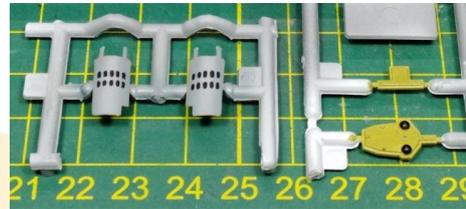
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CONVERTING HASEGAWA'S 1/48 SEPECAT JAGUAR T.2 INTO AN INDIAN AIR FORCE JAGUAR IB (2)

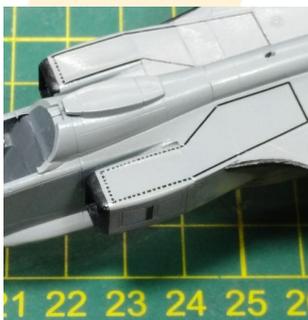
The 10 holes in each airbrake are embossed on the kit parts. I sanded them flat and hand-painted the 'holes' (and the back of the landing lamps. Photo 5).



At this point I pre-shaded major panel lines and hinge lines on all major parts with a dark grey, and then airbrushed a second coat of Xtracolour Barley Grey to blend in the darker shade, finished with a thinned Humbrol Matt Cote for a satin effect. (Photo 6).

The undercarriage was now installed. I drilled right through the axle positions and mounted the mainwheels on paperclip axles. The angle of the nosewheel leg is reinforced with a piece of PE superglued to the inside of the angle.

All leading edges were painted black, to represent anti-radar paint. After a coat of Pledge to protect the finish so far, I now started to apply black decal strip for the walkway lines (Photo 7).



When all were laid down, the dashed lines were formed by painting the grey gaps with a fine brush (Photos 7-9).

The next step was to apply the remaining decals (Photos 10-12). Only some kit decals were useful for this build. A Hobby Boss Sea Hawk provided the upper wing national markings. The rest were produced for me by Decision Height Decals (found on Facebook). The DHD roundels and serials were produced to my specification, so the Hobby Boss roundel colours are not perfectly matched. I simply did not order the larger roundels because I had some old Esci examples – but they are printed very poorly and were unacceptable.



The small white stencil panels on the wing tanks and elsewhere on the model, as per reference photos, was made up of cut sections of white decal strip. The 'writing' on the white stencilling was simulated by some very fine painted marks with a fine brush. 'Reading' them under a magnifying glass will reveal nothing legible! Photo 11 shows the anti-glare shield painted (a very dark grey; almost black), and this would be modified after the windscreen was installed. The

exhaust cans have not yet been installed, but the scalloped area under the rear empennage has been airbrushed with Mr Color 11 Silver.

Photo 12 shows my painted simulation of the hardware at the base of each unused pylon, and the cut-outs at each wing tip for the nav lights.



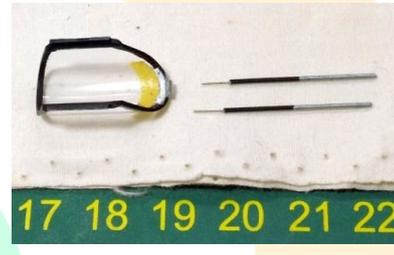
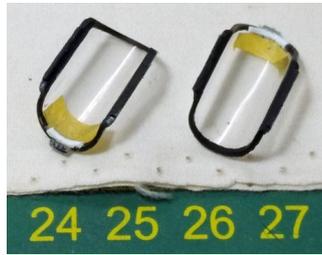


CONVERTING HASEGAWA'S 1/48 SEPECAT JAGUAR T.2 INTO AN INDIAN AIR FORCE JAGUAR IB (3)

At this stage the resin ejection seats were installed. I built up some componentry on the forward cockpit coaming using styrene strip. This was modelled on a resin Neomega 1/48 cockpit set for a GR.1. I also added an extra windscreen, cut from acetate within the forward arch of the mid-canopy frame, and a bulkhead behind the rear seat, with some fuse wire and styrene bits applied to that (Photos 13-15).



I was unhappy with the over-simplified mounting of the open canopies. I applied some styrene strip reinforcement to the rear edge of each, drilled tiny holes in that, and made up some retraction bits from styrene rod and fuse wire to fit (Photos 16-18).



The length of those rods was shortened considerably on installation. Installation was extremely fiddly and tedious and took far too long to negotiate the backs of the ejection seats and get as straight as possible! The canopies had been previously dipped in Pledge, but all this handling certainly took that extra shine off them. But the open canopies, with Airwaves PE mirrors are attached to the front edge of each canopy frame, now look a little more plausible (Photo 19).

The anti-glare shield has been modified around the edge of the windscreen in typical Jaguar fashion, and the twin antennae on the spine behind the cockpit have been replaced by a single antenna.



The smart bomb was now installed. Taken from the spares box, this is a GBU-10 equivalent. (Photo 20).

A smaller, and better-looking, GBU-12 equivalent would be mounted on the rearmost hardpoint of the centre pylon, but I had already drilled and installed a cut paperclip dowel on the centre position. Photo 20 also shows both fuselage gun positions faired over, but I forgot the starboard-side gun gas vents! The exhaust cans have been hand-painted two shades of pale grey mixed with a little silver, and installed.

I use cut paperclips, dowels and superglue to fix hanging things more securely. Due to its architecture, the main u/c legs would have benefited from this too, but I missed it this time. And I have not tried to install miniscule pitot probes and AoA indicators around the nose area because they would not last long!

Finally, I applied Microscale Kristal Klear nav lights all round, painted with Tamiya clear acrylics (Photo 21).

I can recommend the Hasegawa Jaguars (both kits) and will build more.

David Connolly





JET PROVOST TO KIRAN A conversion by Navin Bala



Kiran! For someone who grew up in India, the name barely uttered brings up images of a classy pretty young lass or some Shah Rukh Khan Bollywood movie. For some others, namely an Air Force brat like yours truly, that word is synonymous with HJT16. The cute little indigenous jet trainer designed and built in India by H.A.L.

The HJT-16 Kiran was a side by side two-seat (twindom) layout, 35 foot long, RR Viper11 engined basic and Bristol Siddeley Orpheus engined intermediate trainer serving with the Indian Air Force and Navy. She had her maiden flight on 4th September 1964. This initial design had a clamshell sliding canopy unlike the later production versions. The Kiran Mk1 had a single hardpoint under each wing and the later Kiran Mk2 had two hardpoints under each wing.

The colourful Surya Kiran Aerobatic team of the Indian Air force was formed around the venerable Kiran, until relieved by the induction of BAE Hawks. The Navy's Sagar Pawan aerobatic display team also graced the skies with this cute, dainty, curvy yet potent jet.

My father used to fly the Kiran (or HJT16 as he referred to her), when he was a test pilot with HAL. (I still wonder why they would refer to the letters and numbers rather than the given name.) He used to test the Kirans as they rolled off the assembly line. On one occasion he was tasked with the test flight of a particular airframe tail number U777. Incidentally on that sortie HAL had scheduled a photo shoot. A C119G Packet aircraft being the photo plane whilst Dad waltzed into formation off the port side. That picture of the Kiran with Dad flying her became one of the most famous pictures that found its way across the globe until the advent of the Surya Kirans.



This airframe has a bittersweet memory for me and my father, as the immediate next flight of this aircraft saw the loss of the plane and the two brave test pilots who flew her that evening.

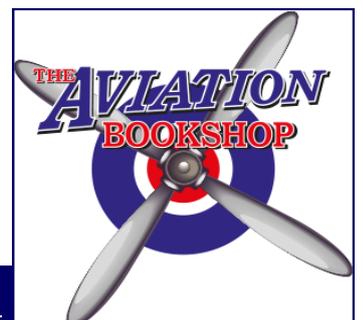
Having heard this story over many years I craved to have a Kiran model and depict her in the markings of U777, but alas, after all these years, no Kiran kit exists to date.

A few years ago I decided to embark on a mission beyond my ability by inserting a MiG21 drop-tank into the chopped nose of an ancient Jet Provost kit and putty it up. I dropped that idea halfway through—for there was rather more to it than I had imagined!

A year later and a few more new Airfix Jet Provost kits in the shop made me embark on the mission again. This time with my good modelling buddies Murlu Rajan and Ratish Nair joining me in this as a Group Build, with each going in a different direction. Me with my kit-chopping; Ratish with a balsa fuselage and bulkheads; and Murlu went the 3D Printing route (however he later decided to back out and save it for another day!)

All my life I heard everyone say the Kiran was just a copy of the Jet Provost but boy I can tell you that it's not even close. Comparing the shapes, I ended up chopping the sides and nose, and sanding the fuselage shape - almost like a monkey cutting off too much at times. The wings had to be pushed further back and a wing spar added. The wings then needed taper so I had to chop and sand those again.

I cut up some spare tail portions of a 72 scale Hawker Hunter drop tank which were the right size and shape for the side intakes. The mainwheels from the Jet Provost and nose wheel of a Vampire, with the flanges, worked a charm. I had some trying times getting the vertical stabiliser the right size and shape, and it took several chopping and re-do sessions! Then the wing fences took some research to see how far they wrapped under the wings, and the peculiar tail design was almost akin to the empennage of the Sabre.





HAL KIRAN CONVERSION—2

By Navin Bala

My canopy vac-forming skills are far from adequate however, four days, one burnt out vacuum cleaner and 10 melted luggage tag plastic cards later, I had myself an acceptable canopy.

I used Mr Surfacer 500 and 1000 extensively. After all this work I ended up with a nose that was far too big so I started sanding it down and just as I reached through the tiny strands of plastic at the edge of the windscreen I was satisfied that it looked "Kiranish".

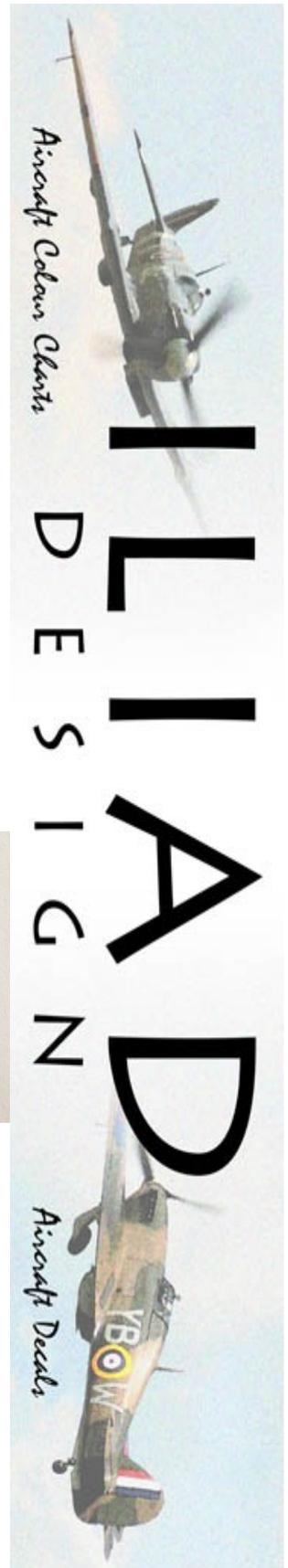
I then re-did the Mr Surfacer 500, 1000 and 1500 and painted her overall with Alclad Al 101. The decals were mustered up from spares and there you have it. My very own U777: but unlike the picture, Dad isn't flying in my model.

There isn't thus far a model kit of this aircraft and I do so hope and pray that some model company takes up this project before it retires into the pages of history. The paint scheme options for a Kiran are wide and varied, from the all Blue Naval to the Red Surya Kiran Sky tailed naval trainers: from saffron, white and green patriotic livery to a sandy three tone Camo on a Mark2, and even a Kiran that ran a cross-country race as the entry from the Air Force and even in Myanmar Air Force livery who accepted delivery of some examples.

I do hope this build of mine sparks up a fervour for this beautiful and cute model that has trained generations of pilots since the 1970s, including a few batches of direct jet-trained cadets, whose first ever plane was the HJT16 Kiran.

A plane that will live on in the hearts, minds and souls of those that this beautiful aircraft has touched.

NAVIN BALA



[Click here to visit the finest website covering Indian military aviation Bharat Rakshak !](#)



THE TUPOLEV TU-16 “BADGER” IN INDONESIA

By Mick Burton, with assistance from Hizkia Steven

Badger Bs, armed with AS-1 Kennel missiles, were flown by Nos 42 and 43 Squadrons of the Indonesian Air Force.

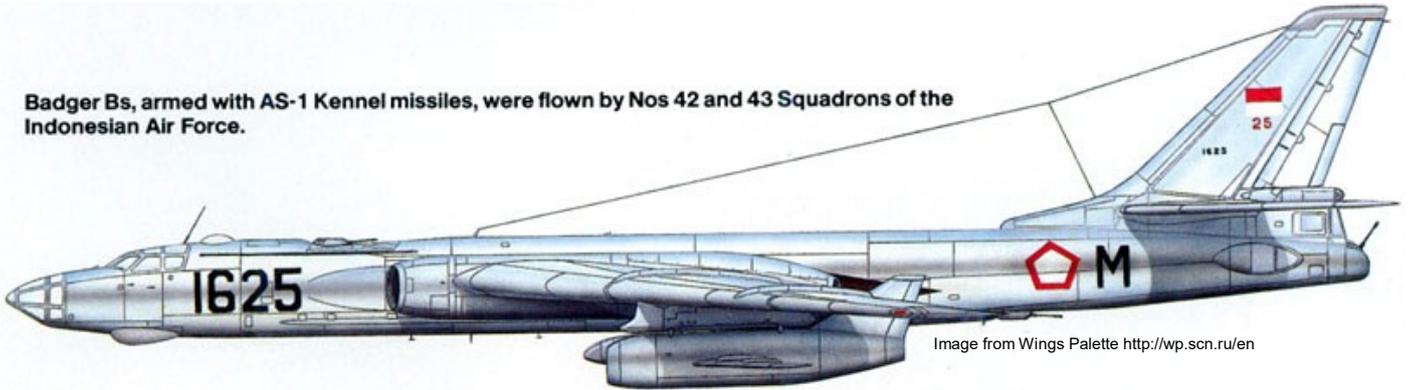


Image from Wings Palette <http://wp.scn.ru/en>

The Republic of Indonesia can probably boast becoming the first nation in South East Asia to be a strategic force in the region when in 1961 the Angkatan Udara Republik Indonesia (AURI, Indonesian Air Force) took delivery of twenty-six Tu-16 “Badgers” from the USSR. Flown alongside their Ilyushin Il-28 “Beagle” medium jet bombers, plus those of the naval air arm, the armed forces of Indonesia would be a formidable offensive force.

The delivery was split between two versions, 14 Tu-16A “Badger-A” pure bombers and 12 Tu-16KS “Badger-B” missile carriers. They were serialised from M1601 to M1626, (certainly M1616, M1618, M1619, M1620, M1622, M1623, M1624, M1625 were KSs), therefore it is likely that M1601 to M1614 were As and the remainder the KSs. Having said that some records give the make up as being 12 of each variant, plus two Tu-16R “Badger-E” reconnaissance aircraft, these two perhaps being M1613 and M1614: this is a likely scenario as two squadrons, Number 41 and Number 42, flew the Tu-16.

The main purpose of the acquisition of the Tu-16 was to counter the Dutch presence in the area, and although a missile attack was planned (Operation Trikora) in 1962 against the RNNS Karel Doorman (formerly HMS Venerable, R81) aircraft carrier fortunately it was never executed. The only defence the Dutch would have had was the handful of Hawker Seahawks embarked, armed with guns and early AIM-9B Sidewinders, and even these were lost in the mid-sixties when the ship’s role changed to anti-submarine warfare. As an aside, the carrier went on to be sold again in 1969, this time to Argentina as ARA Veinticinco de Mayo.



M1622 releasing one of a pair of AS-1s (looks as though it is carrying two under one wing!)



M1607 displaying 41 Skwadron markings (Chakra/Black Thunder) (Henk Schakelar via Hizkia Steven)

kept their original natural metal colour schemes, with the red and white pentagon in five positions; the title AURI occupying the lower right wing as was standard at the time; “M” on the rear fuselage behind the national markings; with the number in black just behind the canopy; the “last two” on the nose wheel doors; and possibly, what is part of the constructor number in red on the fin.

The fleet was grounded in 1969 when support from the USSR was withdrawn, and officially retired the following year.

I am indebted to Hizkia Steven for his assistance in preparing this article.

Mick Burton



M1614 at Iswahyudi AFB





MODELLING THE AURI BADGER IN 1/72

By Mick Burton



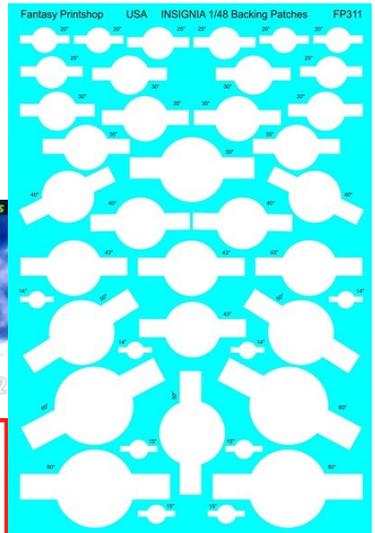
My 72nd Trumpeter model of an AURI Tu-16 had been on the Shelf of Doom for a number of years until the beginning of 2020 when I decided enough was enough and it was time to clear said shelf! The kit is a typical Trumpeter mould, in that it does have some inaccuracies. The obvious one is around the jet intakes but fortunately I had managed to source the Neomega resin correction parts and they fitted perfectly. I also used their wheel set as it came ready coloured.....saving me one horrible job! The national markings came from a 48th scale MiG-17 kit with the serials and titles from the Bright Spark Decals range. ([Click here to order.](#))

FANTASY PRINTSHOP
MODEL DECALS



Since starting the kit Amodel released their AS-1 "Kennel" that was perfect for the "Badger", so after buying a couple I proceeded to build them ready to hang on the finished model. Mid-build I found some photos (acesflyinghigh.wordpress.com/2018/09/29/the-soviet-era-of-the-indonesian-air-force/) of a red training round so finished the first as such. Confession time, the other is still in the box part built.....! Eventually I shall finish it as an in-service missile and hang both on the Tu-16 using mini magnets.

Mick Burton

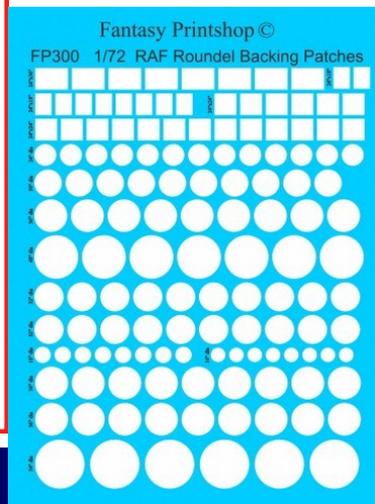


I'd like to give a big welcome to 25 new members

Welcome to: Gennady Nechaev and Alexander Fast from **Russia**; Rajinder Lota, Adam Richter and Alex Brooke from the **USA**; Gideon Putera Yudha and Phiko Leputra from **Indonesia**; Rohaan Asad, Adeel Khan, Hassaan Arain, Xerxes Dastur, Nasir Saeed Iqbal, Tahseen Abidin and Awais Nawaz from **Pakistan**; Thomas Poelkemann and David Dettenhofer from **Germany**; Daniel Soullaine from **Canada**; David Connolly from **Australia**; Hafiz Abdullah from **Bahrain**; Daniel Kowalczuk, Neil McDonald, James Wood, John Hayles, Hugh Thomson and Mark Griffiths from the **UK**.

We now have 464 members from the following 55 countries!

Abu Dhabi, Algeria, Argentina, Australia, Austria, Bahrain, Bangladesh, Belgium, Bermuda, Cambodia, Canada, Chile, China, Croatia, Denmark, Finland, France, Germany, Greece, Guatemala, Honduras, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Laos, Latvia, Malaysia, Malta, Myanmar, Namibia, The Netherlands, New Zealand, Norway, Pakistan, Panama, The Philippines, Portugal, Poland, Qatar, Russia, Singapore, Slovenia, South Korea, Switzerland, Taiwan, Thailand, Ukraine, UK, USA and Venezuela—Phew!





Surya Kiran Hawk Aerobatic Team Indian Air Force



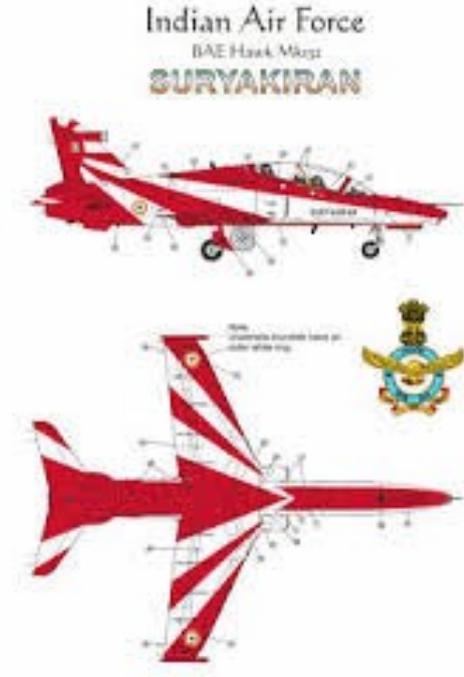
19 Feb, 2019
Wing Commander Gandhi sadly perished when his Hawk aircraft crashed after a **mid air collision** during an aerobatics display of the Surya Kiran aerobatic team in the run-up to the Aero India show in Bengaluru.



Wing Commander Gandhi had flown the Sukhoi-30, Mirage 2000 and MiG 21s and was selected among the best pilots of the Indian Air Force to train on the Hawks in the United Kingdom for two years when the aircraft was inducted into the IAF in the mid 2000s.



Hawk Mk.132 Indian Air Force
Surya Kiran ("Rays of the Sun") is an aerobatics demonstration team of the Indian Air Force. The Surya Kiran Aerobatic Team (SKAT) was formed in 1996 and are a part of the 52nd Squadron of the IAF.





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