

.HyperScale History
.Frank 'n' Hien



.Snakes, Sharks & Warthogs
.Cunningham-Fallen Angel

AERO-TORQUE

The Journal of **WARBIRDS** Aviation Modelling Group - No.003, Jul - Sep 2011



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AERO-TORQUE Issue 003 - Jul / Sep 2011

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Cnr Burwood Rd & Glenferrie Rd—Hawthorn

(Enter from the side entrance off the Plaza in Burwood Rd)

Meetings start at 7:30pm, Admission \$5

Wed October 5th

Wed November 2nd

2012 dates will be announced as soon as they are confirmed

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Cover: The A-10 Thunderbolt is well known for shark-mouths and warthog markings, complete with tusks adorning their noses, but this issue, along with these "standards", we feature Barry Munden's profiles with a none-too common snakemouth.

Editorial - This Is Fun... Isn't It?

It really is bizarre to think how much effort we put into sticking bits of plastic together and all the research we put in to make sure those pieces of plastic (as well as metal and resin amongst other mediums) are shaped correctly, put in the right position and painted just the right colour. Not to mention the amount of time and money we spend on references and researching.

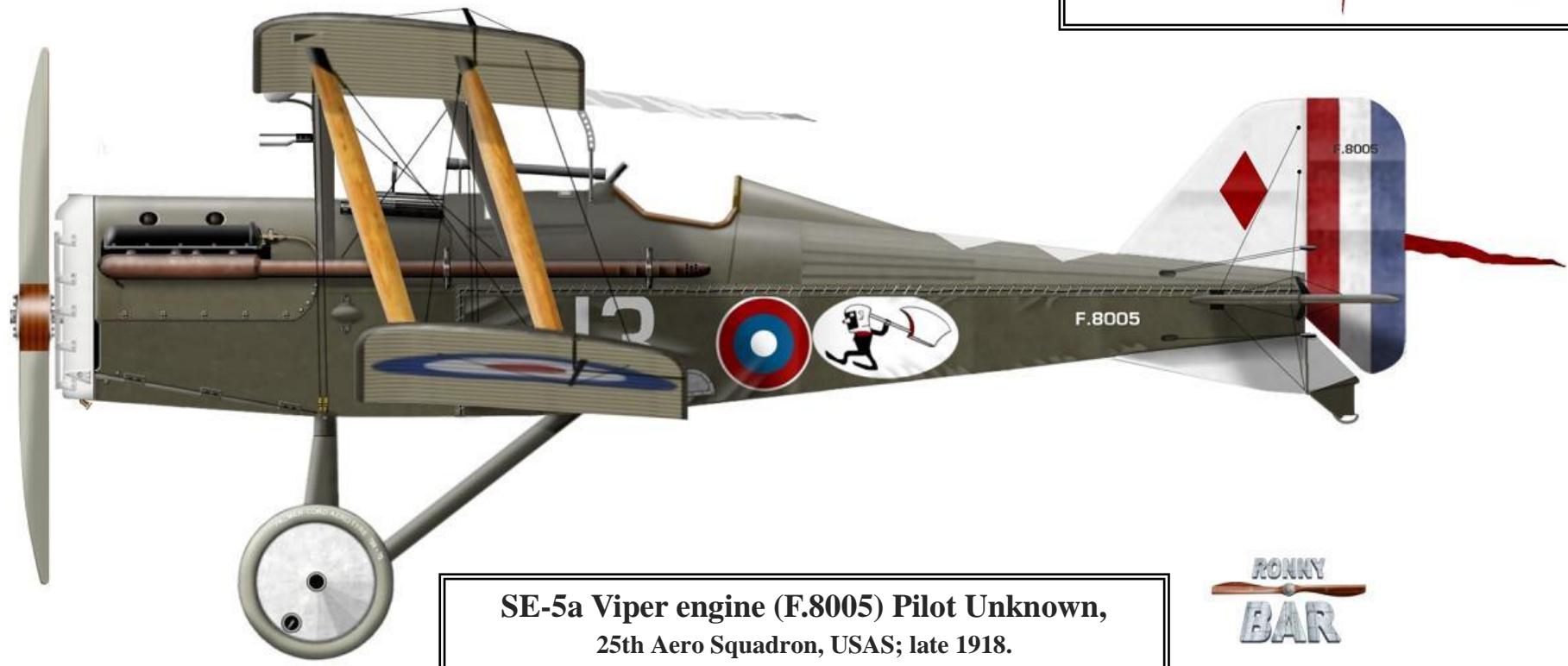
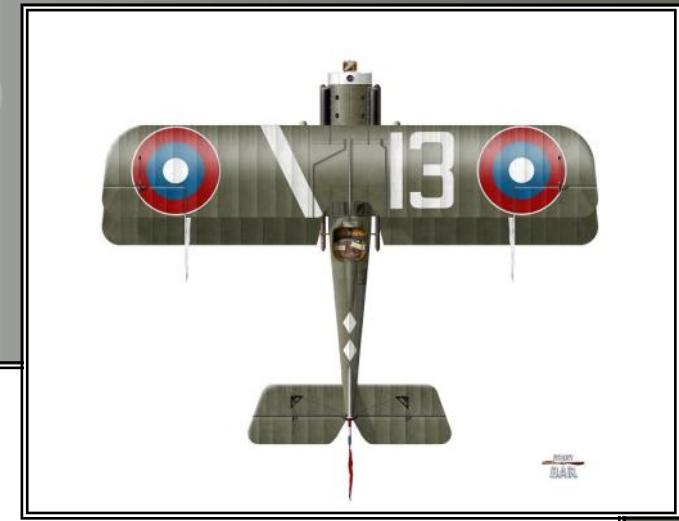
So where's the line drawn between an obsession that's fun or unhealthy? I've been a modeller for many years with my output ranging from factory line to recent years where it's barely noticeable. I've made a lot of friends and had differences also with my colleagues along the way. I've seen the best in people but I've also seen the passion for the hobby taken too far.

What is interesting, as with most aspects of life, it all comes down to intent. I think it's so important we're able to see how kooky we are to others and at the end of the day we are just sticking bits of plastic together. As I said prior, I've seen some take things way too seriously and take their artistic, creative and competitive natures too far. This hobby should be fun for its participants.

I agree with our debutante contributor, Floyd S. Werner's motto... "MODELING IS FUN" (Or in Oz, "MODELLING IS FUN")

I think I'm having fun... I hope you are too.

Ronny Bar's Great War Graphics



A personal selection of a great World War I aircraft for your viewing pleasure from Ronny Bar.

Bell UH-1D 'Slick'

By
Floyd S. Werner Jr.



Floyd's slick 'Slick' carrying the internationally recognised Red Cross emblems

History

The Bell UH-1 is the quintessential helicopter and the iconic image from the Vietnam War. First flown in 1956 as the first turbine powered helicopter for the US Army, the HU-1, nicknamed the Huey, was designed to address the Army's need for a medium lift helicopter. Later redesignated the UH-1, the Huey quickly became the backbone of Army Aviation. Used as a slick troop carrier, gunship, and medivac the Huey took the troops into battle, supported them while there and evacuated them out when necessary. In continuous production since 1962 there were over 16,000 aircraft built. There were many variants including single and twin engine versions. The latest version, the UH-1Y, is still serving in Afghanistan today and for many years to come

also represents the 212/Cobra tail rotor blade. There is no way to fix this other than replacing them. One strange problem is the 'door' on the right side of the tail boom. This caused me considerable work, but more on that later.

Interior

The interior is fairly accurate. I opened up the appropriate holes for the configuration I wanted to do. The front seats need some work. I used some Eduard parts and Apoxy Sculpt along with some scratch built parts to make them more accurate. The bench seats in the back were improved by cutting off the grossly over-scale support legs and replaced with tubing. I also added some seat belt detail so that the

Floyd S Werner's modelling skills, especially his affection for the Messerschmitt Bf/Me109 have been on display for many years across a range of internet based and printed publications. In this edition of AEROTORQUE, Floyd presents his passion for helicopters in the form of a Bell UH-1D in medical guise.

The Italeri 1/48 Scale Kit

You get two sprues of light grey plastic for the major parts. Also included is a sprue of clear parts for the expansive windscreens. Italeri provides you with a decal sheet but I can't comment on them as I didn't use them. Why build this kit? Well to be honest someone gave me a bunch of kits and I said I would. He had things he wanted added to 'his' Huey.

Problems

The overall shape of the kit looks accurate, however, there are some issues that need to be addressed if you are doing a UH-1D/H. First off the easiest one to see is the main rotor blades. As molded they represent the Bell 212 rotor system. The next area is the tail rotor which

seats wouldn't be empty. I elected to not use the rear cabin front seats as they seem to be more 'European' than the American Huey interior. I've never seen this style of seat on any Huey I've ever flown. Dave wanted to add a fuel bladder to the left rear crew area. I used an out of production Cutting Edge Fuel Bladder.

I painted it Gloss Black and used some Apple Barrel color for the straps. Most of the interior was installed by now and then I painted the entire interior Tamiya NATO Black. This was weathered with some sponge and silver paint. Some Mig Pigments were added to add wear and mud at places where the crew would be. Some Krystal Klear was added to the instrument panel gauges to replicate the glass.

Fuselage

There are some things that need to be done prior to putting the fuse-



A great view of the many but subtle shades of green.

Italeri 1:48th Bell UH-1D by Floyd S. Werner Jr, in progress



Before painting, the multimedia components of the pilot seats is clearly evident as is the intricate work gone into them.

lage together. I filled the holes on the tailboom with Apoxy Sculpt as there are a bunch of holes for some antenna posts that were not on the UH-1H I was building. I also added the windows on the cockpit doors as it would be impossible to add them later.

The fuselage went together just fine with the interior fitting nicely inside of it. The fit of the tailboom access panel on the right side was

The Huey's office takes shape



terrible. This was done to allow more aircraft be built from the molds, but it made the tailboom a bear to build and required significant filling and sanding. The fit of the fuselage was okay and only needed some minor filling. The tailboom consisted of huge rivets that I sanded off and replaced with my Rosie the Riveter tool and some panel lines rescribed.

Aftermarket

Dave wanted me to add the Fireball Modelworks Improved Particle Separator (IPS) and Anti-Strela kit so I had to modify some parts to allow them to be added. The IPS would require the most work but with the typical Fireball Modelworks quality there was really no problem.

Main Rotor System

The main rotor blades need to be modified to represent the UH-1H. The first thing to do was to saw the trim tab in slightly then I used a BAF Metal File (Big A's File) to keep things straight. Then all I did was to true up the blades with the smaller portion of the blades. That part was simple enough. I replaced the pitch links with tubing as it was smaller and truer to scale. It isn't perfect but it looks a whole lot better than the Italeri offering.

Tail Rotor

I had an older Esci kit that had the correct tail rotor blade so I just replaced the Italeri part. It fit just fine, although the center portion was a little too large.

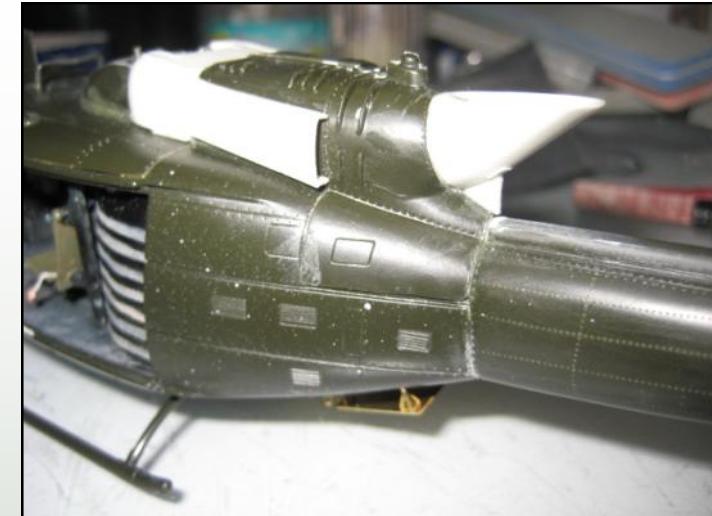
Odds and Ends prior to painting

I added all the clear parts because it would make masking easier. Most of them fit fairly well. The windscreens didn't fit as well as I would like, but it was acceptable. Once all the clear parts were dried I added the doors. With everything in place it was time to mask up the clear parts with Tamiya tape and Mr. Mask All.

Painting

A quick shot of flat black to the window areas to ensure that anything that would be seen on the inside would be black and then the whole model was given a coat of Alclad Grey Primer and Microfiller. Remarkably there were only a few parts that needed additional cleanup.

Time for my favorite part, painting. My instructions from Dave was to beat this thing up like a National Guard bird should look. So I started to do just that. My first thing was to make it brand new looking with a coat of Model Master ACRYLIC US Army Helicopter Green. The



The Fireball Modelworks conversion components of the modified exhaust system give the UH-1D it's distinctive profile.

acrylic is the only accurate color for US Army helicopters. Once this thing was applied over the entire helicopter I added some white to the color and worked some areas in a vertical lines. A couple of more drops of white and some panels were painted. Then I used some Model Master Enamel US Army Helicopter Green which is very grey. This was applied to certain panels. Next some thinned Olive Drab was added to some panels. I added various shades of green to some panels as well. This provided the patchwork paint scheme that I was looking for. Many times the windows are replaced on aircraft and sometimes they are surrounded in a light tan color. I chose to do this to the co-pilot's window. A coat of Alclad Clear Topcoat and it was time for the

If the decal sheet in the top right hand corner is anything to go by, it looks like Floyd is planning or has completed another 109!!!.



decals. The decals were from Fireball Modelworks. They fit very well except for the red cross on the nose which required multiple coats of Solvaset. This was followed up by a Dull-coat and it was time to weather this model.

Weathering

I added sponge weathering with some zinc chromate and silver. On top of this I added some Mig Pigments to add the mud and the weathering was done. I thought about adding some Sin Filters and a wash but I liked what I had so I decided not to do it. Removal of the masking tape and polish the windows and this model was done.

Conclusions

The model was easy enough to build but there were some areas that needed work, namely the tail boom and out of the box you can not build an accurate Vietnam era Huey. There are also plenty of other things that need to be 'fixed', but nothing too drastic. I did not like the fit of the front window but it was not too bad.

The Fireball Modelworks conversion sets and decals were all up to the high standards I've come to expect of this company. While I did enjoy the build and the final product I was disappointed in the fact that the rivets were huge for the scale as were the panel lines. Would I recommend this kit, yes, but you have to be willing to do the work for it. Surely a model company would produce a good Vietnam era Huey.

Thanks to Dave for the opportunity to do this workhorse of a helicopter. I hope he enjoys it as much as I did building it. I am very pleased with the final product and will use the techniques again in the future.

References

OK so this is a shameless plug, the only reference I needed was the Werner's Wings UH-1 Huey Long Bodied DVD (RWAS-02). It contains over 1,600 photos of Long Bodied Hueys designed with the model builder in mind. You can get yours at www.wernerswings.com .



The End! (and yes, the pun IS intended.)

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Info@wernerswings.com' and 'You can also find us on:' followed by icons for eBay and Facebook."/>

Floyd S. Werner, Jr.: Master Modeler

Floyd is well known for his Luftwaffe aircraft, especially his Bf-109s. Floyd's models regularly place first in many regional and national contests. His unique model photography gives his models instant recognition for their historical perspective. He is a part of the IPMS/USA Reviewer Corps and has been published numerous times in The Journal and on the website. His work has been featured in Finescale Modeler magazine and he has written countless articles for many local IPMS magazines and at various websites, including Hyperscale. Floyd's models have been used as box art for various manufacturers' kits, including AMtech and ARBA. An associate editor for Aviation in Miniatures, an aviation modeling magazine, Floyd continues to be a driving influence in the modeling community.

Floyd retired from the Army after 21 years of flying Cobras and Kiowa Warriors, including tours in Iraq, Bosnia, Korea, and Germany. He currently flies helicopters for the Baltimore Police Department. His motto has always been - MODELING IS FUN!



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Bell UH-1D 'Slick' Gallery



PACIFIC MUSTANGS

Profiles
by
Claes Sundin



There's no doubt 1/32 scale has come back in a big way (no pun intended) over the last ten years. A raft of high quality offerings from many leading brands continues to reinforce the scale. Tamiya's most recent offering, the Mustang to the 1/32 market is their impressive F51-D Mustang. Claes Sundin offers up some inspiration via a pair of attractive bare-metal Pacific schemes.

South Australian Scale Model Expo 2011

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FRIDAY	7.00pm – 9.30pm
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Entry Costs (Per Kit)

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Technical Judged	\$3.00
People's Choice (only)	\$2.00
Min. Charge (Adults)	\$6.00
Ages 14 – 17	\$1.00
Ages 13 & Under	FREE

Volunteer Judges Required

Entrants are encouraged to participate in the judging of entries (in the technical judged categories) on Saturday from 5:00pm

Viewing Times & Costs

SATURDAY	9.00am – 5.00pm
SUNDAY	9.00am – 5.00pm
<i>Presentations : SUNDAY from 4:00pm</i>	
Entrants	FREE
Adults	\$6.00
Concession	\$3.00
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Ian Keizers

Chris Dowsett

Photography

by

Ian Keizers

John Svendson

Michael Tabone

Chris Dowsett

Model Expo 2011



Co-founder Martin Reid presides over the debut display by Warbirds members.

The Australian Open Plastic & Scale Model Championships was held over June 11th till 13th 2011 on the Queens Birthday long weekend. The Sandown Entertainment Centre at the Sandown racecourse is a wonderful venue with plenty of room and a restaurant for when you can finally drag yourself away from the tables for some much needed refreshments. With over 600 entries there was a cornucopia of models to gaze at wonderment over. The quality of the builds at the Melbourne Model Expo has always been at the highest level and this year was no exception. There were over 50 categories and plenty of trophies to be picked up but the top finishers. The traders were all stocked up with some amazing bargains, so trying to keep your hard earned folding stuff in your wallet was a real challenge. On Monday the 13th was the swap and sell, this has always been popular with the modellers as you can always pick up a bargain or two or three. The Warbirds AMG stand was a complete success which proved to be quite popular with the public, so congratulations to Chris Dowsett for coordinating it and all members that contributed.

And from our Display Co-ordinator, Chris Dowsett:

As you well know, we had our official launch and first club display at the 2011 Model Expo held in June at the Sandown Race Course in Victoria. It was a great chance for our young club to show the modelling community just what we are all about and entice new members.

The theme was '100 Years of Military Aviation' and it was, from the very start, a good idea as our fellow members didn't need to build any kits especially for the display. It was an excellent spread of kits of different modelling scales and showcased some of the most iconic aircraft ever to fly in anger.

All the standard types were represented, such as fighters, trainers, helicopters and transport aircraft. On the display was a Wright Brothers Flyer, which was a very important kit for our theme as it was the very first military aircraft in history. Another interesting subject was a German pre WW2 Kranich glider. Both of these kits were built by Laurence Farrugia.

Also on display were two beautifully built 1:48 scale F18 Hornets by Lawrence Parry. One of these Hornets, the CF-18 of the Royal Canadian Air Force with the very attractive Tiger Meet scheme, was a major hit with most punters that visited our display. It even had some people come back to the display, just to have another look.

Martin Reid, in addition to his freshly completed Wingnuts Roland, dusted off the weeds from two kits out of his collection so we could have an example of the famous Spitfire, and the iconic corrugated workhorse of the Luftwaffe, the Ju-52 transport, both in 1:48 scale. Geoff Jenkins came up trumps with a number of WW1 aircraft and of course...a Lancaster bomber, all in 1:72 scale.

Other kits contributed by Stephen Portelli, Steve Keogh, Ian Keizers, Brett Johnson, Don Jenkins, John "The Shagger" Svendson were also welcome additions to the display, enabling us to create a broad representation of 100 Years of Military Aviation.

It was decided to keep the display free of information on the table and produce an A4 size flyer that included information about each aircraft displayed, and also dou-

SNAPSHOTS Expo Special



Geoff Jenkins's 1/72 scale Canadian Lancaster with Firebee drones took top honours.

Model Expo 2011

bled as a great introduction to our club that could be taken home and read later. It also contained artwork profiles from Ronny Bar and Claes Sundin. Laurence's lovely wife, Kim handled the printing of the colour flyer with great results. Great job Kim, thank you. She also worked on the grey cloths that draped on the tables. Unfortunately her sewing machine had other ideas, however she persisted and they were all ready for the weekend.

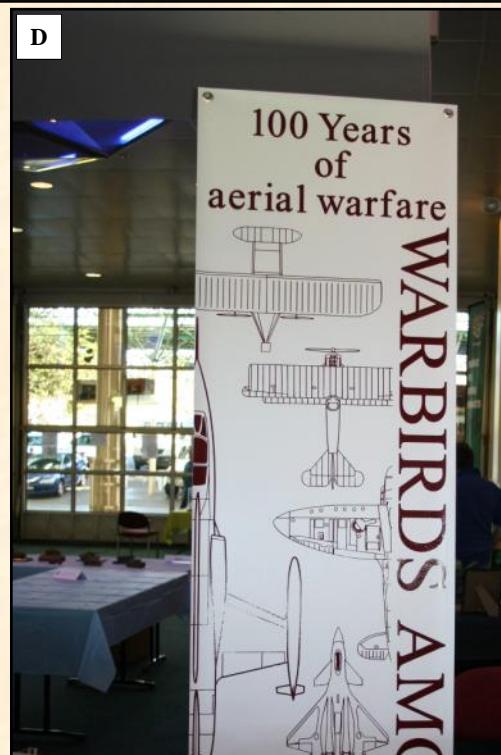
Also, if you had read the information on the flyer, you would have noticed that Laurence's name came up a few times as he kindly offered to fill any areas we may have been a little light-on, by opening up his modelling cabinet and offering any kits that would be of interest to the display. And the pièce de résistance, was Claes Sundin's beautiful framed Spitfire Mk1 artwork in the centre of the display.

All in all, the event was a positive and great way to get us all involved in the Expo long weekend and I look forward to our 2011 display "50's and 60's Jets", which we are busily building for right now.

- A:** This 1/72 Grumman Intruder looks great in something other than overall grey.
- B:** Lawrence Parry's Royal Canadian Air Force CF-18 in Tiger Meet scheme.
- C:** There was a great selection of 1/32 scale piston engined aircraft.



D



D: The Warbirds AMG display with it's broad selection of military aircraft over the past 100 years.

E: A 1st place recipient, a Greek McDonnell Douglas F4-E Phantom.

F: From the 'Jet Age', a trio courtesy of Warbird members, Ian Keizers and Geoff Jenkins as seen on the Warbirds display table.

E



F

G: Our very own Michael Tabone had his Base 44, model bases on sale at Expo.

H: This "digital" scheme applied to the Hornet should have earned the builder a straight jacket!



H

Model Expo 2011

G

Model Expo 2011



I



J



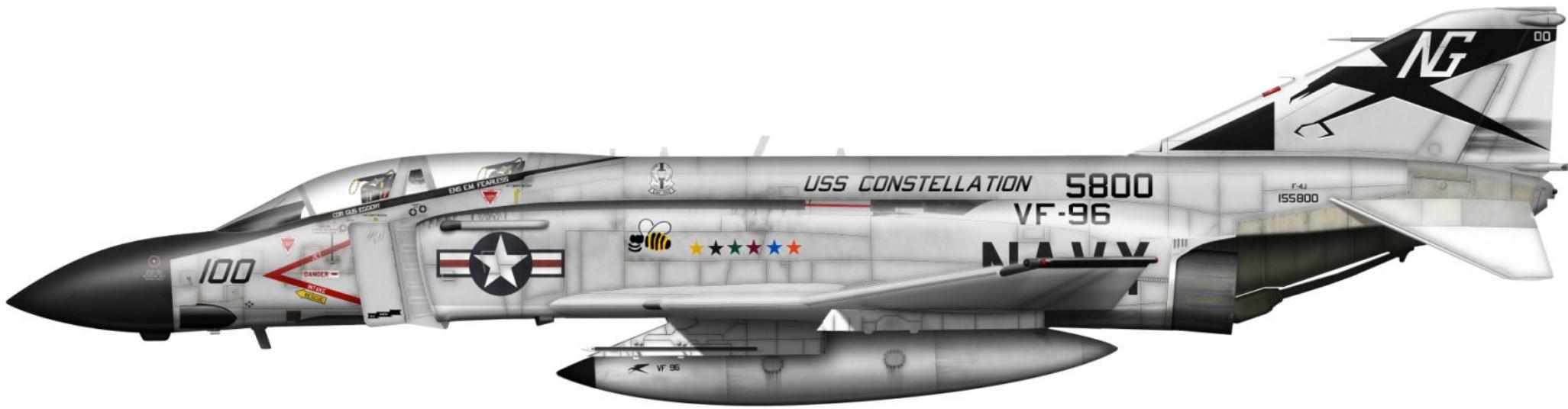
Not Just Aeroplanes!

K



5 Or More! - An Aces Profile

Cunningham
Fallen Angel



Lieuwe de Vries
Aviation Illustrations and Photography

Flown by Lt. Randall Cunningham & Lt William Driscoll, VF-96, Vietnam, 10th May 1972

When looking at flying aces, we are usually enthralled with the exploits of a man before during and after his flying career. In most cases the subject matter leads a life of quite fictional proportions that get young and old alike daydreaming of a life in the clouds. On the surface, the story of Duke 'Randy' Cunningham starts out that way but sadly his life after his aerial glory is not one of boyhood dreams, rather a sad decline into infamy.

Cunningham's career spanned 20 years in the U.S Navy and lays claim to be only one of only a few Vietnam Era Aces in U.S service in conjunction with his Radar Officer, Lt. William Driscoll. Perhaps best known for his defeat of the North Vietnamese Ace, Col. Nguyen Toon, Cunningham very nearly met his end but skilfully outmanoeuvred him in a series of rolling scissors manoeuvres paralleled by them both but eventually forcing Toon or as he became known, "Col Tomb", via skilful use of his airbrakes before him eventually gaining victory thanks to a well placed Sidewinder missile. Post Vietnam, he was best known militarily for his role at the Navy's TOP GUN fighter pilot school of which unconfirmed rumours abound, the 1984 movie draws inspiration from.

In 2006, Cunningham was sentenced to 8 years and 4 months jail for corruption and a range of other charges. In this case, rather than an atypical presentation of facts and figures, you are encouraged to research the history of this enigmatic airman and determine for yourself... Randy Cunningham, saint or sinner?, you make up your own mind.

5 Or More! - An Aces Profile

Cunningham
Fallen Angel

'Showtime 100' ordnance load during its last mission

'Showtime 100's last mission eventuated with Cunningham and Driscoll succeeding in destroying 3 MiG 17s only to then lose 'Showtime 100' to a SAM. Showtime 100 impacted into the sea with both crew members ejecting successfully before impact and being rescued by a CH-46 Sea Knight

This information will allow modellers to build a model 'Showtime 100' with the correct ordnance load for each stage of its historical last mission

Note: The following ordnance load was constant during the mission

Front Sparrow bays – Empty

Rear Sparrow bays – 2 x AIM 7E sparrows

Centreline tank – present throughout entire mission

Outer wing pylons – present but empty

Mission Stage	Twin rail launcher Mounted on inner pylons	Triple Ejector Racks (TER) Mounted on inner pylon	TER load
Launch from carrier	4 X AIM 9G Sidewinders	TER present	3 X Mk 20 Rockeye Cluster bombs
First MiG 17 kill engaged	4 X AIM 9G Sidewinders	TER present	empty
Second MiG 17 Kill engaged	3 X AIM 9G Sidewinders	TER present	empty
Third MiG 17 Kill engaged	2 X AIM 9G Sidewinders	TER present	empty
Impacted by SAM	1 X AIM 9G Sidewinder	TER present	empty
Showtime 100 impacts the sea	1 X AIM 9G Sidewinder	TER present	empty



Reading / Magnifying Glasses

Unfortunately the reality is the average age of the modelling population is getting older and no matter how hard we try to convince ourselves otherwise, we all need a little help of one kind or another.

During my recent build of the Wingnut Wings 1/32 Roland, I was going quite well until it came to the rigging and then the self-deception came to a grinding halt. It was at this point I recalled seeing a modelling colleague wearing his \$5 magnifying / reading glasses a month or so earlier and the reality hit... My eyes weren't what they used to be.

So it was down to the shopping centre and I scoured the large selection of reading glasses in the newsagent, I found a pair of 4x strength glasses and \$5 later I was cursing my earlier pride now knowing that detail interior painting could and should have been better.



Okay, these aren't fashion items, but that's not the point. Is it???

There are a wide array of magnifying tools to fit all budgets but the humble and cheap reading glasses really do provide an invaluable tool that modellers of all ages (and eye strengths) could benefit from. Now with the experience in modelling with them, I can see even "normal" visioned modellers could benefit from their use with their fine detail work.

An interesting sidenote, I've always been extremely short-sighted and as a result have never been able to model with contact lenses as this has severely restricted my ability to see close up when wearing the contact lenses. The reading glasses are a real boon here to as I can now model with my contact lenses and use the reading glasses as needed.

There's nothing stopping you having a mini-arsenal of different strengths for different applications. More than highly recommended... An absolute necessity regardless of age or eye-strength!!!

What could or should be on your
modelling bench to help you?

Benchmarks



"Snakes, Sharks & Warthogs"

Profiles by Barry Munden

Commentary by Laurence Farrugia

The first instalment of Aero Art featured the A-10 Thunderbolt adorned with rather impressive and aggressive Warthog nose art.

This instalment see's three magnificent profiles from Barry Munden showing the A-10 as a great canvas for more than just a Warthog. For more of Barry's work, please visit his site located at:

<http://www.boomandzoomgraphics.com>



A-10 Warthog of the 163rd Fighter Squadron "Blacksnakes"

© 2008 Barry Munden



The A10 Thunderbolt operated by the USAF is a true case of beauty in the eye of the beholder. To friendly ground troops its presence is an assurance that they are backed-up by serious fire power in the form of the only USAF aircraft that was designed with the pure intent of ground support. To an enemy, the A10 Thunderbolt has a completely different appearance as it seems to be an almost indestructible nemesis that can rain precise destruction from outside the effective range of their weapons.

Affectionately nicknamed the 'Warthog', the A10 has been decorated with appropriate nose art but has also sported different nose art in the form of snake heads and other creatures. The Warthog's seemingly indestructibility is the result of a design philosophy that required a high degree of survivability as it was to operate in the low level ground attack role. As such it was expected that Warthogs would be exposed to attack

from small arms to surface to air missiles. The Warthog's defensive measures are approx 500 KG of titanium armour protecting vital components of the airframe and equipment including the entire cockpit tub and the ammunition drum for the GAU 30MM Avenger cannon. The flight control systems have multiple redundancy systems and hydraulics with self sealing fuel tanks and fuel lines feeding the high bypass turbo fan engines.

The engines themselves are placed high on the fuselage to allow the tail fins and tailplanes to mask the heat signature of an already cool efflux due to the 4:1 ratio of the turbo fan engines; all of which protect against heat seeking portable SAMs such as the SA7 Grail of Soviet design. The Warthog, however tough as it is, was expected to suffer battle damage. Its designed-in survivability is such that it is able to return to base



“Snakes, Sharks & Warthogs”



A-10 Warthog of the 74th Fighter Squadron “Flying Tigers”

© 2008 Barry J. Bandol

with a tail and fin torn off, half a wing and a complete engine missing. If the damage affects the undercarriage from extending under hydraulic power, it is designed to be extended rearwards and locked down by the airstream. If this were to fail completely, the semi exposed tires allows the Warthog to belly land onto the retracted main tires maintaining some control whilst protecting the airframe as much as possible from additional damage.

This veritable flying tank was not designed just to take damage but also to dish it out. The aircraft was designed around the 30MM Avenger cannon and its ammunition drum. The Avenger is still the most powerful airborne cannon carried by any aircraft in the world. The range, accuracy and firepower of this weapon allows the Warthog to engage and destroy tanks and anti-aircraft armoured vehicles such as the Soviet designed ZSU-23-4, from outside the effective range of its 23MM cannon shells.

Regarding additional armament, also utilised were the Maverick air to surface missile against armoured vehicles. The infra red optical guidance systems allow the missile to track and target AFVs from a greater range than the cannon. The systems optical system has also been employed as a poor man's FLIR system by Warthog pilots operating in the Gulf and European conflicts, as the Warthog does not carry sophisticated electronic systems and aids. It however, can be described as a pilot's aircraft as it still requires the pilot to fly the aircraft rather than have multiple computers doing the work. This versatile machine can engage in air to air combat but will do so more as a self defensive measure than a prime objective.

The only exception to this is when Warthogs are tasked with engaging enemy helicopters. The Warthog's ability to turn low and slow allow it to engage helicopters with the 30MM Avenger cannon. Even heavily armoured helicopters such as the MIL 24 Hind would literally be torn to shreds by the heavy kinetic impact from the de-

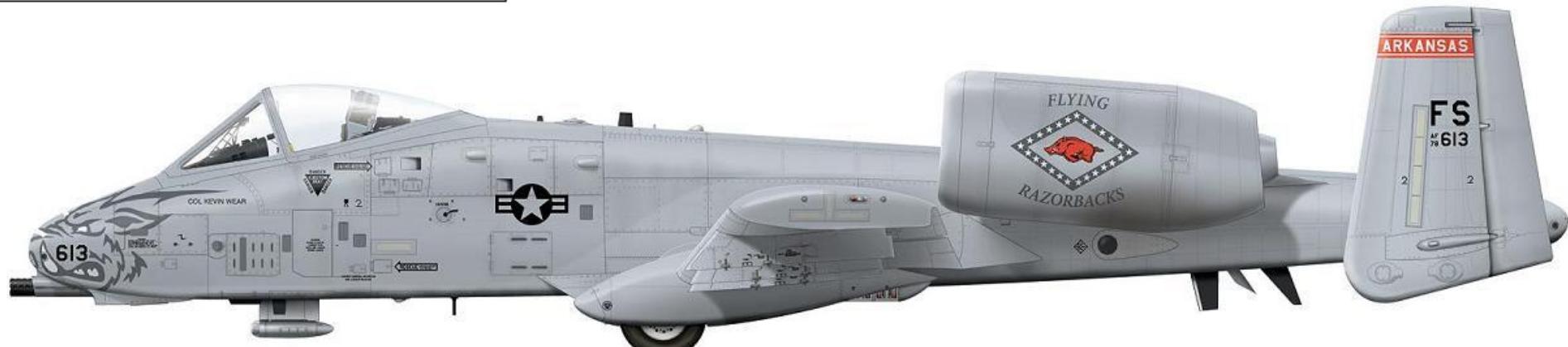
“The Warthog's seemingly indestructibility is the result of a design philosophy that required a high degree of survivability as it was to operate in the low level ground attack role”

pleted uranium projectiles that the jets are a risk low level in an Warthog. To Warthog has late model on the outer would try to force the fast jet to overshoot their aircraft and would then retaliate by utilising Sidewinder missiles and the 30 MM Avenger cannon.

The Warthog has carried a number of different colour schemes since its active career started in 1975. Early production Warthogs were painted in an overall light gray. Similar schemes to an air superiority scheme of light gray and blue gray were also evaluated in the Warthogs early days, as were some experimental JAWS or 'peanut' multi coloured mottled schemes. However the Warthog was camouflaged for most of its operational service in the standard Europe 1 scheme of light green, dark green and dark gray in a wrap-around



"Snakes, Sharks & Warthogs"



A-10 Warthog of the 188th Fighter Wing "Arkansas Razorbacks"

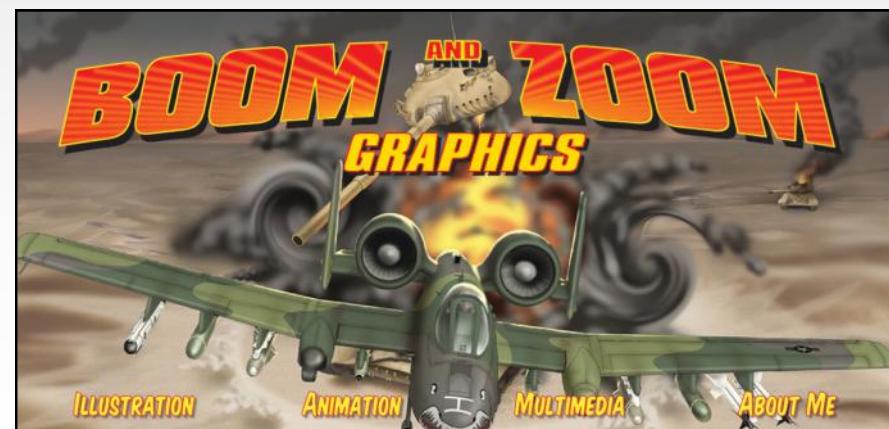
© 2008 Barry Mandel

scheme designed to hide the aircraft in a heavily wooded European environment. The rapid deployment into the Gulf war in 1991 saw the Warthog operating in a desert environment in this European scheme. As time has moved on and the threat to the Warthog is no longer perceived to be from above by high flying fast jets but is now at threat from ground troops armed with shoulder launch missiles. The Warthog has come full circle and is adorned in an overall air superiority gray to better mask the aircraft against the sky background. Occasionally the scheme carries a false cockpit painted on the fuselage underside to assist confusion as to the aircrafts attitude and heading. Regardless of the paint carried on the surface, under it is a unique aircraft that has been designed and combat proven to be able to dish out a deadly offensive punch and has the ability to survive being at the receiving end.

"Fast jets are a risk when descending to low level in an attempt to take on the Warthog"

www.boomandzoomgraphics.com

For more Warthogs, go to



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Birth of a Logo Pt.3

WARBIRDS Members, dont forget the 50's & 60's Group Build.
Send in your in-progress shots ready for the launch of the Group Build Gallery in November.



Lieuwe de Vries
Aviation Illustrations and Photography

So here it is, our jet logo, none other than the F104 Starfighter. The Starfighter was essentially nothing more than a piloted missile with guns but nonetheless epitomised the classic era of jets through the 50's and 60's. Still today, the sharp and clean lines of the F104 look modern, fast and dangerous. Lieuwe de Vries from The Netherlands has kindly applied his talents to our jet logo.

Check out Lieuwe's website www.liewedevries.com for a stunning array of his work which is available for sale from www.aviationgraphic.com. Commissions are also available.



Martin's Hasegawa's 1/48 Frank with ominous skull markings from Superscale.

MEMBERS MODELS

BY

LAURENCE FARRUGIA

AND
MARTIN REID



Laurence's kit-bashed Ki-61 II built from the Arii/Otaki Ki-61 & Ki100 kits.

FRANK 'N' HIEN - JAPAN'S FRONT LINE FIGHTERS

I wonder if this pilot should have gone with a four leaf clover in battle?



The Kawasaki Ki-61 Hien and the Nakajima Ki-84 Hayate are arguably two of the most recognisable Japanese fighters of World War 2 after the immortal Zero.

The Ki-61 was initially designed in and flown in 1941 where as the Ki-84 was designed in 1942 and flown in mid 1944. The span of time that elapsed between the designs of these two aircraft and the lesson learnt during a long and bitter war resulted in two very distinctly different aircraft.

Airframe

The Ki-61 and Ki-84 can both be described as low wing monoplanes of stress light alloy construction, but the similarity basically stops there. The Ki-61 featured a reasonably high aspect ratio wing with traditional flaps whereas the Ki-84 featured a lower aspect wing that

The Ki-61's lines are best captured in an all-over natural metal finish.



featured Fowler style flaps that added to the wings overall surface area for landing and increased manoeuvrability. The Ki-61 featured a raised spine where as the Ki-84 feature a cut down rear fuselage with a tear drop canopy (though still heavily framed that gave increased visibility to the rear. This was an important feature that was learnt through the experience of war.



Note the Ki-84's Fowler style flaps.

The most noticeable airframe differences however came about because of the difference in the power plants. The Ki-61 utilised an inverted liquid cooled V-12 engine that gave a slender profile and cross section that also necessitated the need for ventral radiator housing. To accommodate this engine the Ki-61 displayed a unique engine mounting bearing design that was integral to the fuselage structure. This was in direct contrast to bolt on engine mountings in almost every aircraft design at this period of time.

The Ki-84 featured a large 18 cylinder air-cooled radial engine that featured only a small under cowl fairing to house the oil cooler. The Frank was a stressed skinned monoplane utilising the standard construction methods employed in the early 1940s. The exceptions to this were to come late in the war as Japan faced a shortage of raw materials. The attempts to conserve light alloys other materials were tested on the Franks construction. The first attempts of introducing wood into the construction of the Frank saw wooden wing tips and rear fuselage sections made of this material. An all wooden version of the Frank was redesignated KI 106 and was represented by the single prototype as was the sole Ki 113 version of the Frank that used a high percentage of steel in its construction.

Power Plants

The Ki-61 most notable feature amongst all Japanese fighters produced in WW 2 was the Ha-40 engine. This was a licence built version of the Daimler Benz DB 601A. The Ki 60 which is similar to the Ki-61 was the first aircraft to be powered by this engine but this aircraft proved disappointing and development was ceased and efforts then

concentrated on the Ki-61. The Ha 40 produced 1,175 Hp (876 KW) and propelled the Hien to a top speed of 348 mph (560 kph). The Ha 40 however would display major problems with main bearing failures. This problem coupled with the Japanese unfamiliarity with maintaining liquid cooled engines would lead to diminishing production of the Ha 40 and eventually see the last versions of Ki-61s being adapted to accept radial engines and receiving the new designation of Ki-100.



The sharp aggressive lines of the Ki-61's Ha40s shrouded nose.

The Ki-84 Hayate was powered by a Nakajima Ha-45 radial engine that had an output of 1900HP (1416 KW) giving the Ki-84 a top speed of 392 mph (631 Kph). The Ha-45 proved to be an excellent engine whose reputation was only tarnished by most Ki-84 being extremely overworked in their struggle against allied superiority.



The same view of the Ki-84's radial that many Allied bomber crew had.

Weapons

A weapon fit out on both aircraft was not dissimilar and was in line with the Japanese designs of the times. The Ki-61 was typically armed with a pair of 7.7 Mm machine guns, mounted in the fuselage above the engine and a pair of 12.7 mm guns in the wings. The 12.7 mm guns were soon replaced with imported 20mm Mauser MG 151 cannons in the Ki-61 Ia. The Ki-61 Ib was armed with four 12.7 mm guns. The Ki-84 was originally fitted with two fuselage mounted 12.7 mm guns and two wing mounted 20 mm cannon. Later variants would be armed with four 20 mm cannon and the Ki-84 Ic would be armed with two 20 mm cannon and two 30 mm cannon.

Both aircraft had provision to mount underwing drop tanks and later versions of both had the capability to carry a pair of 250 Kg bombs.

Variants

The Ki-61 was to retain its profile for most of its variants. The later type featured a slightly extended nose (21.6 cm) on the Ki-61- II. The key change was the last version being the Ki-61-III that featured the extended nose and a cut down rear fuselage spine coupled with a tear drop canopy. It is believed that only one of these aircraft was produced before hostilities ceased. This canopy was a major feature of later radial powered Ki 100s.



The Ki-100 isn't difficult to confuse with the Ki-84.

The Ki-84 on the other hand was to retain its profile through to the end of the war. The fast approaching end of the war denied the Frank further development apart from alternative building materials being tested. As can be seen in the photograph above, once the radial engine was mated with the Tony's fuselage, the Ki-100 would have been easy to confuse with the Frank by Allied pilots with the similarly bulbous nose and teardrop canopy profiles. Only a keen eye would pick the difference, particularly in the heat of battle.



NAKAJIMA Ki-84 - FRANK

© CLAES SUNDIN



A machine from *Hitachi Kyodo Hiko Shidan*, Mito airfield/Japan, February 1945.

Operational Use

Early tests of the Ki-61 against a captured P40E and a purchased Bf 109E soon showed that the Ki-61 was superior to both aircraft in all aspects. The Ki-61 was to prove to be a very capable aircraft in all aspects. The aircraft however was hampered by engine problems and engine supply problems. The bombing by the USAF of the Akashi engine plant resulted in the total cease of production of the Ha-40 engine.

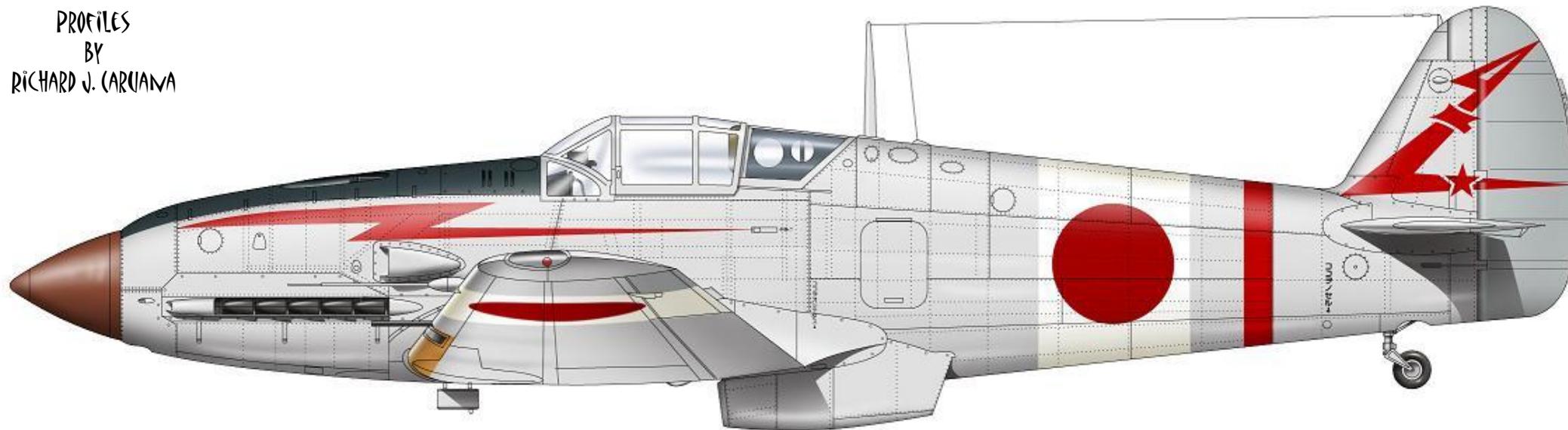
Despite these many problems Ki-61s were proven in action against B29s raiding Japan and against allied fighters of the time. Many Ki-61s were to be used successfully in special attacks (ramming) against high flying B29s some of which were stripped of all armament to allow them the ability to reach the fast and high flying B29s.

The Ki-84 made its first operational appearance at the battle of Leyte in 1944 and served in the most intense battle areas as the Allied forces steadily pushed towards the Japanese homelands. Ki-84s were employed as fighters, fighter bombers, dive bombers and air interceptors over Tokyo.

The Ki-84 proved in combat to possess a higher manoeuvrability and climb rate than the much vaunted P51 Mustang and P47N. The aircraft's only vice was unserviceability due to being extremely overworked and the simple fact that there were too few Ki-84s to stem the overwhelming allied forces. Had the Ki-84 been able to be produced in numbers, and with sufficiently trained pilots, it would have proven to be of a major concern for all Allied flyers.

Despite its late introduction into the conflict the Ki-84 was to be the mount of several Imperial Japanese Army Air Force aces. Aces clearly demonstrated the lethality of the Frank in combat. Isamu Sasaki, an ace with 38+ victories, flew Franks from Fussa airfield in Tokyo in 1945. Whilst operating from this field, Isamu Sasaki managed the incredible feat of destroying 3 B-29s on the night of 25 May 1945.

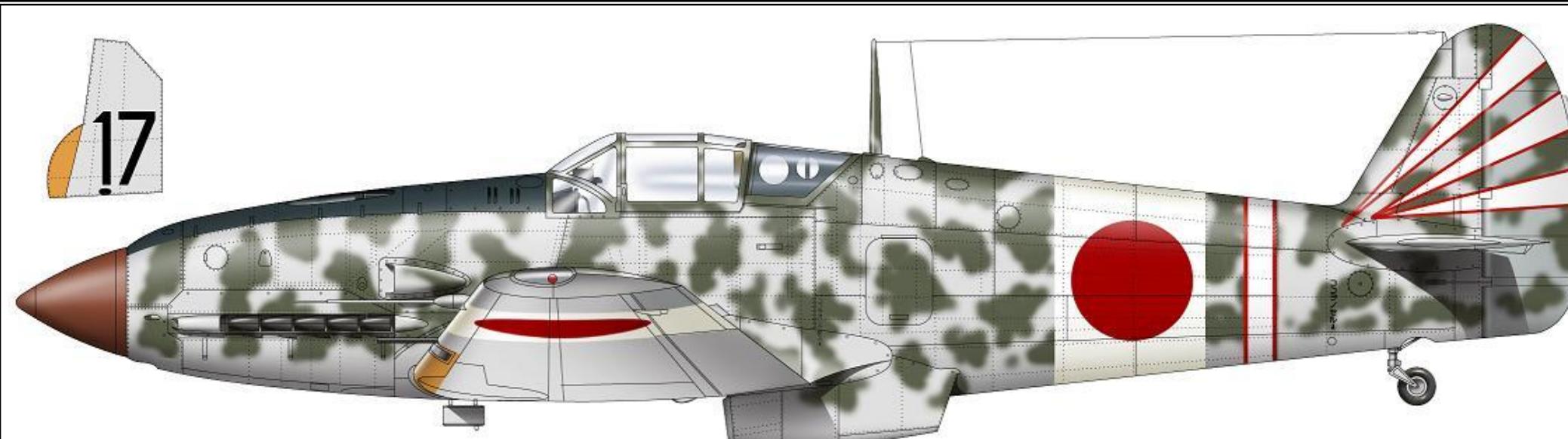
Capt Tomojiko Ogawa was another ace who demonstrated the Frank was able to engage Allied single engine fighters on at least an equal basis and succeeded in destroying 5 of the much vaunted P-51 Mus-



KAWASAKI Ki-61 - TONY

Above: Kawasaki Ki-61-I-Hei, flown by Sgt Tadao Sumi, 2nd Chutai, 244th Sentai, Chofu, November 1944. Natural metal overall with black anti-dazzle panel; red flash and band on fuselage. Hinomaru over a 'home defence' white background; red-dish-brown spinner. Red fin marking

Below: Kawasaki Ki-61-I-Hei, '17', 1st Chutai, 18th Sentai. Natural metal overall with black anti-dazzle panel; dark green mottling on upper surfaces. Hinomaru over a 'home defence' white background; reddish-brown spinner. Red/white fin marking and rear fuselage band; '17' in black on mainwheel doors



tangs and a further 2 P-47 Thunderbolts. Both of these aces were awarded the *Bukusho* in recognition of the courage in combat. In the later days of the conflict Ki-84s were used in ground attacks, as escorts to other 'special attack' aircraft and then engaged in ship strafing when released from their escort duties. Ki-84s were also utilised as special attack aircraft themselves.

Related aircraft to the Ki-61

The Ki-61 had a large influence from the BF 109E. It featured the same engine and similar armament but the BF 109 could only be termed a cousin to the Ki-61. The aircraft that could be closer termed as a step brother was Italy's MC 202 Folgore.

Both aircraft feature utilisation of the DB 601 engine heavy machine guns mounted above the engine with 20 mm Mauser cannon in the wings, ventral radiator mounting and a high fuselage decking behind the cockpit and were produced by Germany's axis partners using German designed engines and weapons. The Ki-61 and the MC 202 were excellent aircraft for their time but both were plagued by insufficient numbers being available to make a serious contribution to their country's war efforts. Italy had more success than Japan with the in line

Daimler Benz engines that would see further development of the MC 202 into the MC 205 and other designs using inline V-12 engines. Japan on the other hand was to rely far heavily on radial engines for most of its designs.

What's in a name?

To identify Japanese fighter due to their sometimes unknown and complex naming system, Allied intelligence began assigning code names to various aircraft. This department was lead by Major Frank McCoy and most of this work was performed while based in Brisbane Australia in 1942. To categorise various aircraft types it was decided that Fighters would be assigned boys names, bombers would be assigned girls names, transports with names starting with T. Training aircraft would receive names of trees while gliders would receive the names of birds.

Names selected were generally selected based on the known people that members of the unit had contact with or knew of. As Major Frank McCoy was the head of this intelligence unit he decided to use his name as well of those of his staff and family. After originally using his name on what was later discovered to be a fictitious aircraft, McCoy

reassigned the code name Frank to the Ki-84. At the time the Ki-61 was viewed as being very similar to the MC 202 and to potentially have had a great deal of Italian influence in its design. As such McCoy's team assigned it what they believed to be a significant Italian name of Tony as the shortened version of Antonio.

Modelling the Ki-61 and Ki-84

32 scale

The recent appearance of the Hasegawa KI-61 and Ki-84 has offered modellers a fine example of both subjects. Both kits build easily and have the excellent surface and cockpit detail that is expected from this manufacturer.

The only criticism with these kits is that that are relatively simple and do not have some of the features that other manufacturers are doing in this scale such as highly detailed engines that can be displayed in the exposed set up or a wider option of weapons stores. Revell Japan produced a 32 scale Ki-61 many years ago. While it has some faults in the canopy area and inaccurate engine mounts requiring the engine bay to be closed up, it however has recessed panel lines and indented

The Daimler Benz DB-601 Family

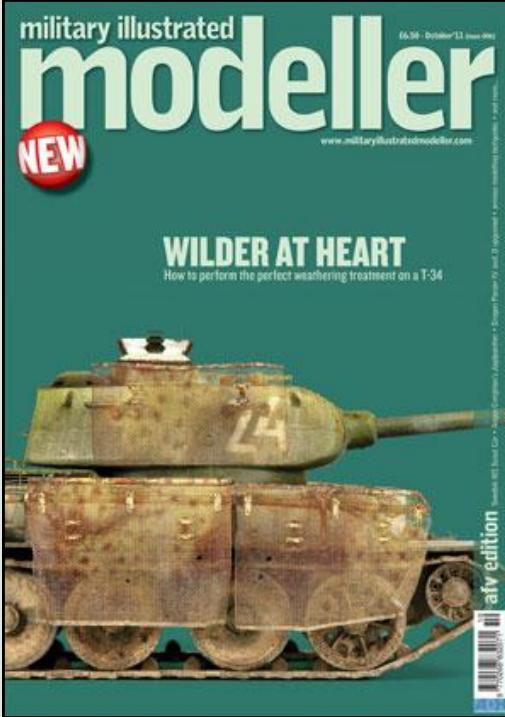
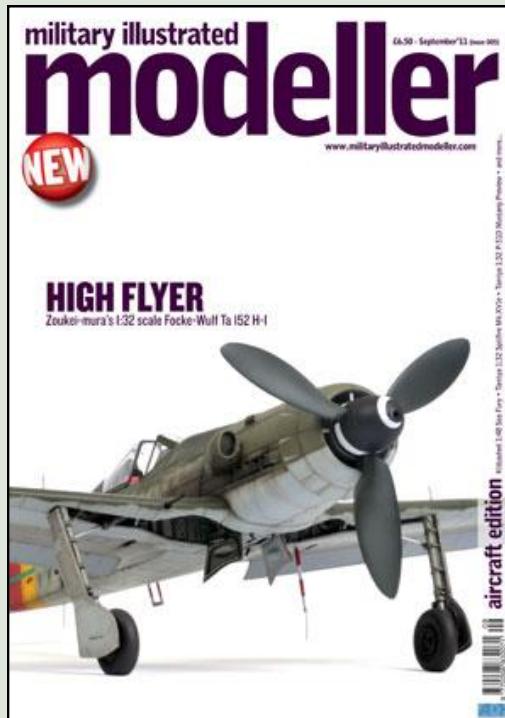


Laurence Farrugia's trio of 1/72 scale Axis fighters display the similar, but not exact nose profiles of the aircraft containing the DB-601 (Above: the Bf109E) and their cousins, the Italian Alfa Romeo RA100 (Centre: Macchi Mc202) and Kawasaki Ha40. (Upper Far Right, Kawasaki Ki-61)

Far Right: A preserved DB-601.

Photo courtesy of Wikipedia Commons.





rivets. The cockpit area is a bit sparse. Never the less it is sought as a collectable as the injection moulds no longer exist. The most sought after boxing is the 'made in Japan' boxing that featured a small information booklet and an alternative decal sheet produced by Super Scale. It appears that the Revell 32 scale Tony will build into a passable Ki-61 with surface detail that is similar to that currently offered by Hobby Boss and Trumpeter large scale aircraft.

48 scale

The late Hasegawa 48 scale Ki-84 is considered as one of Hasegawa's best kits and is a delight to build with excellent detail in the surface area detail and cockpits. The same can be said of the Hasegawa Ki-61 which has been around for some while now. The simplicity of the 48 scale Ki-61 can be boosted with details sets such as Aires produces for this kit. The detail set gives weapons and engine bay detail as well as some cockpit enhancements.

Right Staff and ToyCraft Berg produced limited run kits of the Ki-61. Both these companies no longer exist and both are sought after as collectables. The novel feature of these kits was the injected resin manufacturing process utilised to produce the main airframe components. There is a single small injected plastic sprue, mainly for the props and spinner. The remainder of the kit is supplied in white metal castings, brass tubing, and photo etched metal.

The instruction sheet is very basic and requires a bit of modelling assembly knowledge as step by step assembly is not covered. The result will be a finely detailed model but is slightly marred by the scribed panel lines being slightly heavy. This kit can only be recommended to an experienced builder due to its cost, lack of detailed instructions and the heavy use of multi media.

The ARII kit of the Ki-61 is passable but suffers from a lack of accurate detail in the cockpits and wheel well details. They however build up into reasonable renditions of the Ki-61 and are recommended if you want to build a fleet of Ki-61s as decal and colour scheme carriers.

72 scale

Hasegawa produces an excellent kit of the Ki-61 in 72 scale with good cockpit detail in this scale. Scribed panel lines are a feature of this kit which builds with no vices at all.

The only criticism that extends to the majority of the Ki-61 kits is the inability of the cockpit canopy to be displayed in the open position though this can be rectified by the aftermarket vac form canopies that are available.

The 1/72 range of Tony's can't be let go without mentioning the range of Fine Molds kits ranging a great span of the Ki-61 and radial engine Ki-100 variants. Great builds and suitable for excellent out-of-box or detailed projects.

Just "Scratching The Surface"

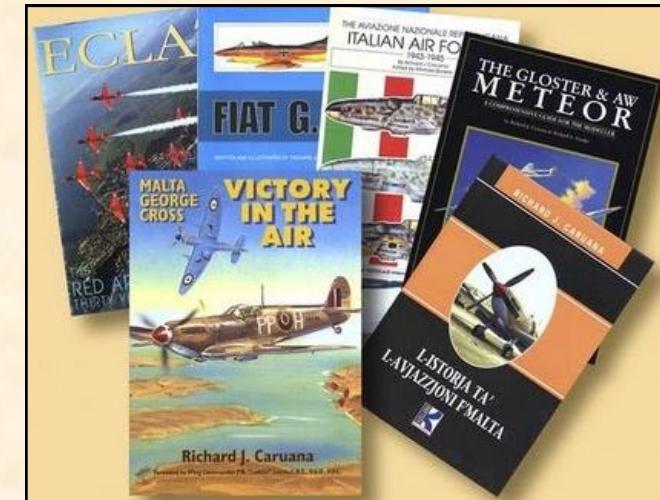
This article has only been a small insight into these two outstanding Japanese flying machines, their history and modelling options. A big thank you goes to Richard Caruana and Claes Sundin for their profiles which hopefully will inspire some "Frank 'n' Hiens" to hit modellers benches sooner rather than later.

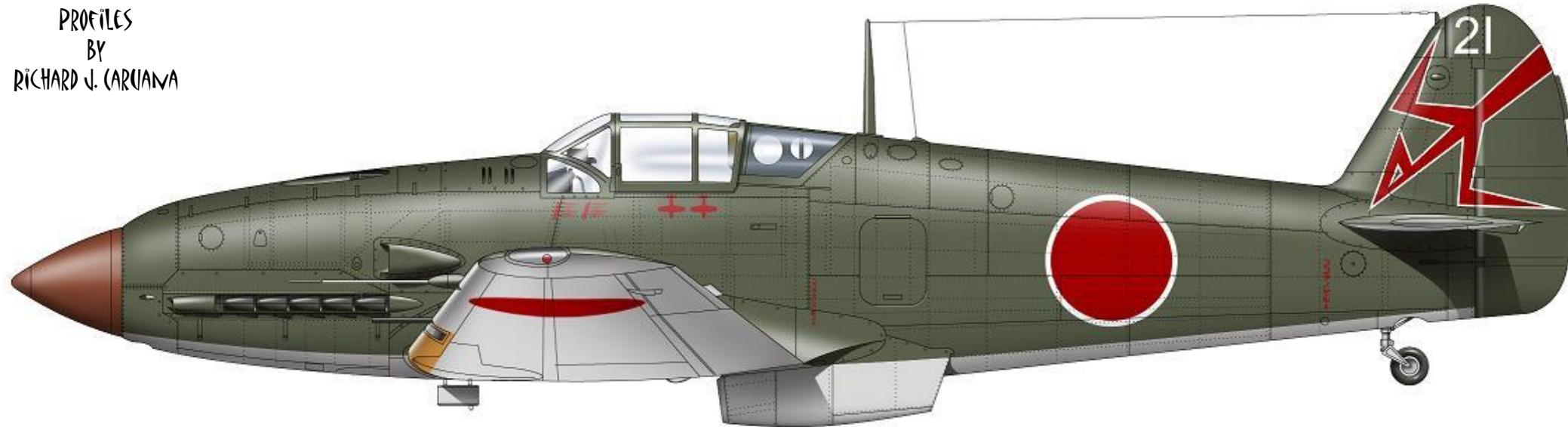
Welcome to Richard J. Caruana and many thanks for permission to reproduce his fine Ki-61 profiles.

Richard, from Malta, has been a stalwart in the aviation illustration scene for many years well before the digital age. Click the link below to see more of Richards work and his many achievements.



<http://sites.google.com/site/rjaviationart/>

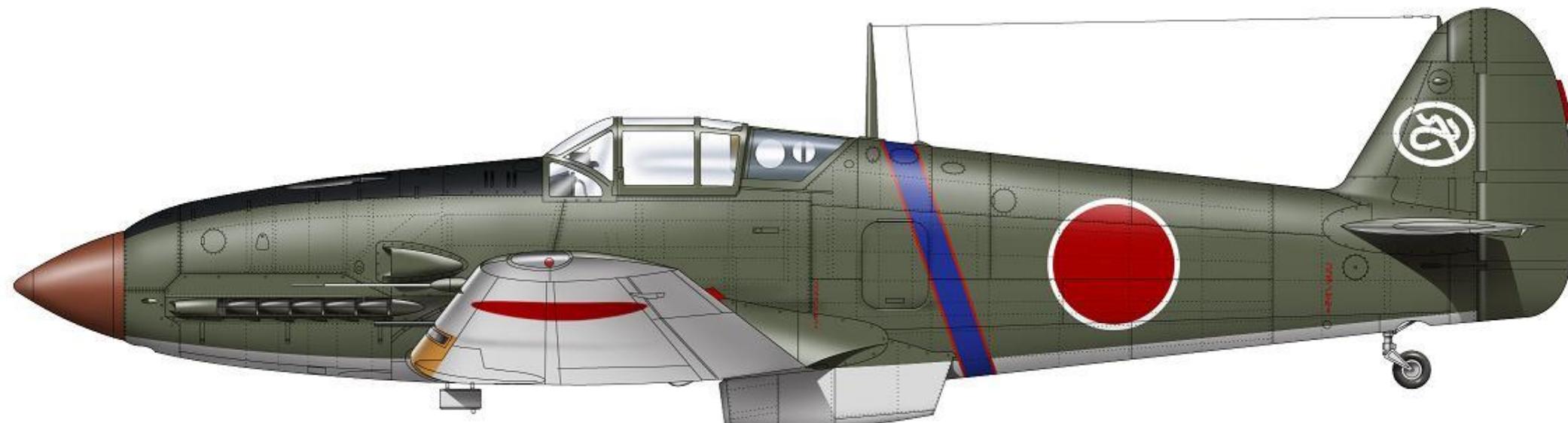




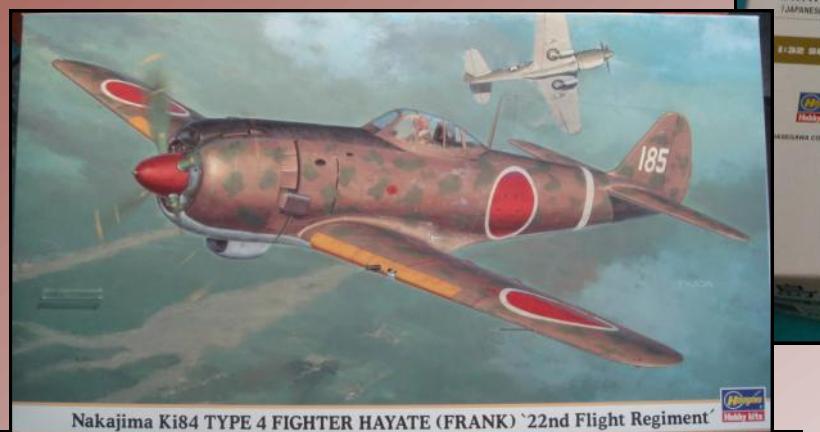
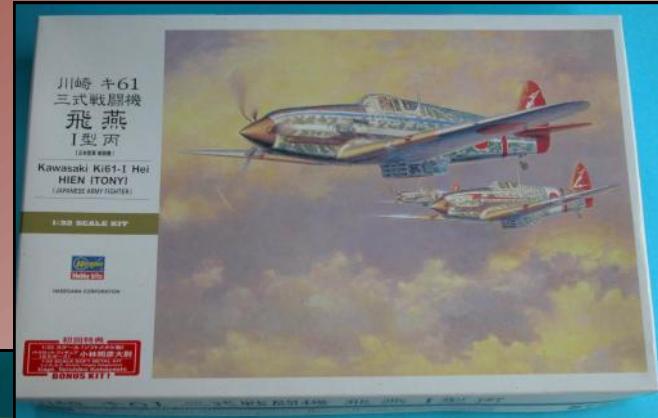
KAWASAKI Ki-61 - TONY

Above: Kawasaki Ki-61-I-Hei, 21, 2nd Chutai, 39th Sentai. Dark green upper surfaces with natural metal undersides; reddish-brown spinner. Red/white unit marking on tail; '21' in white on rudder. Victory markings on port side only

Below: Kawasaki Ki-61-I-Hei, 55th Sentai, 1945. Dark green upper surfaces with natural metal undersides; black anti-dazzle panel. Reddish-brown spinner; blue band, edged in red, around fuselage. White unit marking on fin



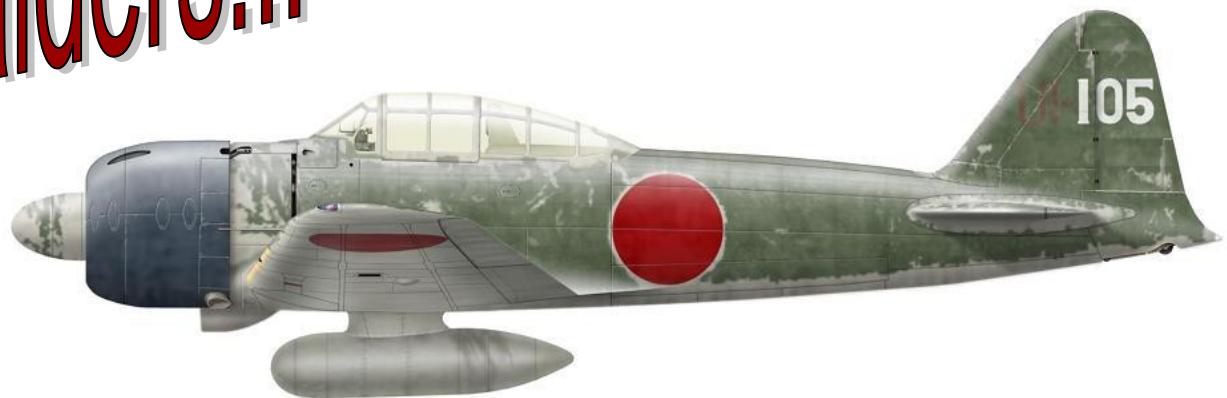
A SELECTION OF FRANK 'N' HIEN KITS FROM OVER THE YEARS



THE FRANK 'N' HIEN KIT GALLERY

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MITSHUBISHI A6M3 ZERO 22

(UI-105) Hiroyoshi Nishisawa, 251 Kokutai, IJNAF
Rabaul, New Britain, South West Pacific; Summer 1943.



FOCKE-WULF Fw-190A-4

11/JG-5 "Eismeer"; Stavanger-Sola, Norway; Feb.1944.



Well known for his pre-eminent work in the field of World War I aviation profile work, Ronny Bar shares with us some of his World War II Warbirds.

Representing the Axis forces of this era, we see Ronny's profile work of three famous radial-engine fighters.

The Mitsubishi Zero, Focke-Wulf Fw190A and Fiat need little introduction to enthusiasts and represented their respective Axis countries efforts to provide a competitive edge to their war efforts.

Ronny's Radial Raiders!!!

cont...

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You can purchase copies of these profiles and there are many other examples of Ronny's work in both the World War I and II era's.

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FIAT G-50
Maggiore Mario Bonzano; 20° Gruppo; CAI
Maldegem, Belgium; March 1941

RONNY BAR
AIRCRAFT PROFILES

A (Very...) SHORT BIOGRAPHY:

Ronny Bar was born on February 11th 1951 in Buenos Aires, Argentina. He was in contact with airplanes at an early age, when he used to visit the local Palermo Air Force Base in Buenos Aires, and he first flew at the age of twelve in the back seat of a T-34. After his first flight, he became hooked, and he began to draw airplanes and build models. Spiffing and Messerschmitts at first, Canbels and Fokkers later...

However, when it came to choose a trade he chose Rock and Roll, and so he became quite a successful bass player with a career lasting over 35 years in several bands, including the well known 'Rocking Chair' one which sold more than 100,000 copies! and performing countless concerts, gigs and TV shows all over the country.

Now, retired from the R'n'R scenario, he gave place to his another passion: Aviation Art. In one of the first steps taken he made some color WWI airplanes resident at Hendon, near London, UK, finally establishing his already growing interest for that historic period...

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design by

Blue Angel Heaven Miramar 2010

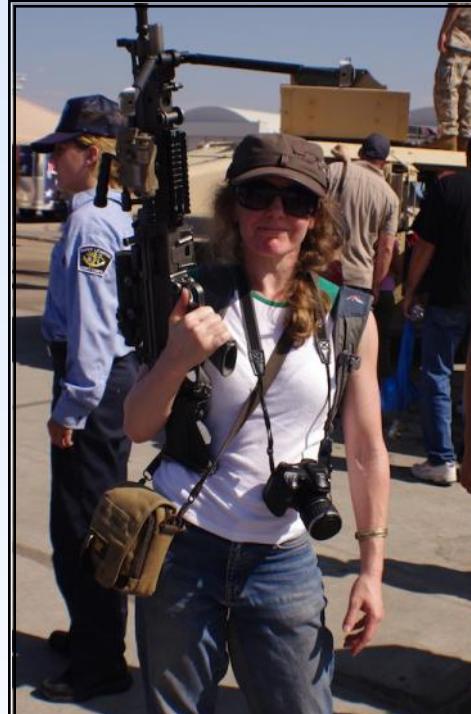
AIR SHOW REPORT

Beep! Beep! Beep! Man, it's 6:00am on a Saturday morning. The night before I was celebrating Collingwood's (Australian Football League) win in the Grand Final. Now it all comes back, today's the big day at the Miramar Air show in San Diego. My partner Jo(anne) has limited me to two air shows whilst over in the States, and this is the first of the two shows. I had worked out that I could go to an air show every weekend over there, but she who'll be obeyed said NO!

We arrived there at about 7:30 to beat the rush and only had a minor traffic jam, went through two checks stations then into the air show. Suddenly I realised we haven't parted with any money, WOW, this is free??? Too hard to describe how big it was just standing there looking at aircraft for as far as the eye can see, the static display was enormous. You're able to walk right



The camera's not out of focus, this F22 interacts in a spectacular fashion with the high humidity at Miramar



Don's partner Jo, said he could only go to two airshows while they were in the U.S. Would you argue with her?

Whilst walking around Jo took off over to this huge marine, who handed Jo this massive machine gun weighing around 17kgs then she dumped him and myself for a much smaller machine gun (not good having a gun hungry missus), yes they let you man handle the weapons and you could even crawl through an Abrahams tank. I can't describe how amazing the static display was, but the variety of aircraft was awesome, just look at some of the pictures.

I'm still not sure what time the flying started as we were still walking around the static display, I saw helicopters and even Ospreys were flying around for quite some time in the beginning. Then, the Harriers came out and made all the noise in the world as they do, when landing and taking off. There was a grandstand to sit in but you needed to make a booking. We opted to sit at one of the oasis setups in the middle as the view was excellent thanks to that wide walkway and the area behind it. It didn't matter too much where you stood as the aircraft virtually flew almost anywhere.

by Don Jenkins

up to all the displays, no barriers. Arriving so early gave plenty of time to walk around and take heaps of photos. Just to explain the layout of the amenities, every 100mtrs was what they call an oasis with umbrellas and fresh water (these became handy later), with about a 30-40mtr wide walkway with coffee stands and of course food and some other liquids, and of course the souvenirs.

What amazed us was one section amongst the static display, the marines had reserved for their own stalls, with the proceeds going towards charities and I think they said their Christmas fund as well. So naturally we bought a little from most of the stalls.



Above: While technically not a shark-mouth, the eyes on this Sea Knight gives the impression of one out of the lower forward windows.

Lower Right: The low slung CH-53 looks menacing at rest.

Upper Right: Detail of the personal markings of whom one assumes is the pilot and mechanic.

Miramar 2010

Blue Angel Heaven



While there was plenty to see and enjoy at Miramar, the fans of the Blue Angels were treated to a magnificent display of aircraft, their pilots and capabilities

Left: These F18's may have yellow stripes down their back, but their pilots are no cowards.



Is there any other way to see the Blue Angels go through their paces?.



Hey, Hey, Hey, It's Fat Albert!

Miramar 2010



Don found his next car...

The usual aircraft came out F16's, P51's, F18's, etc. Then something that all the Avalon people missed, the F22 Raptor flew past and did some of the most amazing flying and due to the high humidity the compressed air (?) was awesome as the plane was banking. Not to rub this in but I'm pretty sure it was up that long that I had time for a nap, woke up and the F22 was still flying, and then did a fly by with the P51 and F16, and it even dwarfed the F16. Most of the aircraft stayed up for up to 20 minutes each, or it seemed that long, and they definitely don't go by Australian rules as a few flew straight over the audience at times.

At about 3pm the Blue Angles came on and man, I was watching aircraft with about a meter between them. Jo was talking to someone about that at the show and this lady knew one of the pilots, and advised Jo that it was a meter. The tricks they performed..., well you had to be there! After the Blues Angles had finished, we decided to go, as the heat and humidity was getting to us, We had flown out of Melbourne with 16c temperatures.

Saturdays' show continued till about 9pm, with what I was told, an impressive night display also. Whilst walking out to the car park, the next aircraft was an F15 Strike Eagle. Once again this show was amazing, from the walk to the car park this pilot was doing aerobatics at tree top level above the people walking back to their cars as well as over the tarmac. The tight turns for such a large and old aircraft amazed us, as we bid Miramar farewell.

My advice is, if you only get to see one air show in the States, make it Miramar, if possible I will go back again. The following weekend we were off to Midlands Texas for the Warbirds Air Show.



Yes, there were planes there too as well as some questionable fashion sense.



...and Jo found hers!!!



Above: A very, very blue F-16 of the US Marines

Upper Left: A formation of three fine US fighters through the ages.

Lower Left: OK, so who's old enough to remember the nose art on this Skyraider on bottles of Coppertone suntan lotion?

Below: An impressive line up of Ospreys, however one looks ready to head off early!



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Along with presenting the talents of our members, we seek to present the work of the finest from across the globe to present their modelling, digital rendering and research work.



- Military Aviation of all Eras & Countries
- Member only monthly newsletter "RECON".
- Monthly Member Meetings Feb to Nov (Based in Melbourne, Australia)



The Warbirds financial year run July to June each year.

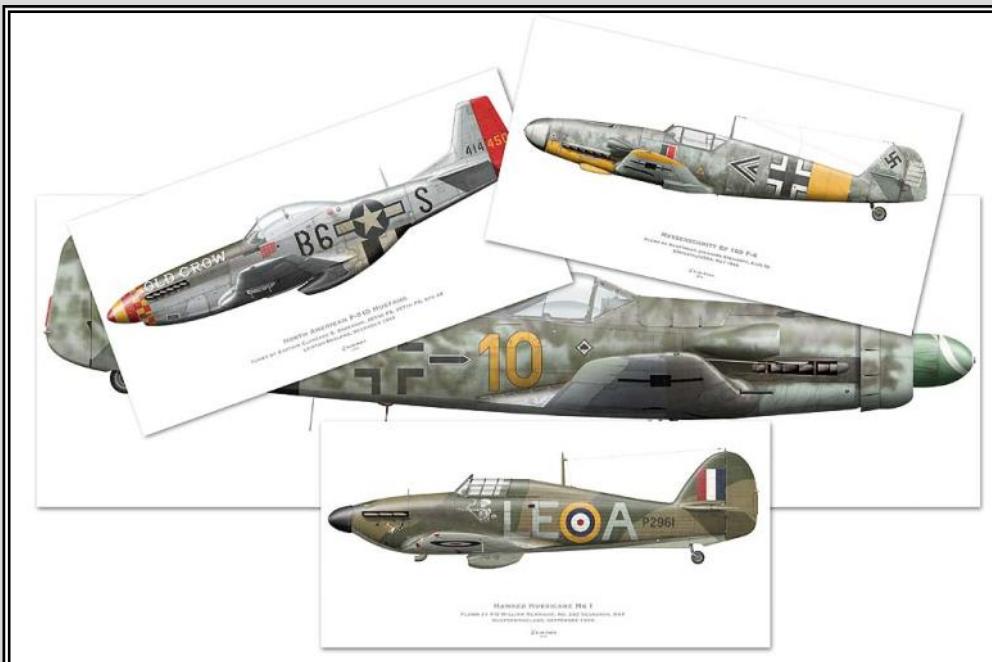
Groundcrew Foundation \$30AUD

Associate Foundation \$20AUD

These are for Country, Interstate & International members who would not normally be able to attend meetings. Pilot Foundation Memberships can be purchased by Associates.

ARTWORK

From Claes Sundin — sundin@bjarenet.com



Prints for sale!

So make your own pick from all the 2 000 stunning aircraft profiles that I have made to date. For order or information about prints or commissioned work please send me an e-mail.

I now offer prints in highest print and paper quality with very long durability. The prints could be ordered in sizes from A3 to a meter in length. You could select between Luftwaffe fighters, fighter-bombers and bombers, Axis machines or why not your favourite Allied type from RAF, USAAF or VVS.

www.luftwaffeinprofile.se

Every modelling community has at least one guru. The modeller who's work sets the standards. The Melbourne scene has a number of these and one such modeller is Glenn Irvine.

Glenn's work in 1/72 scale over the last 20 years has been mind boggling. Making sparse use of detail sets, he is no "kit assembler", rather a true modeller, continually seeking new ideas and techniques to turn pig's ears into silk purses. For many years at Melbourne's Model Expo in the 1/72 Aircraft Open category, the interest was what Glenn bought and who would get 2nd and 3rd placing.

As you'll see from this instalment, Glenn's skills are not limited to 1/72 scale and are also not limited to just aircraft. Have a look on the inside rear cover too. Glenn's artistic talents are evident in the 2D also.



While best known for his Luftwaffe subjects, Glenn masterfully utilised the 1/72 Hasegawa kit of the Macchi Mc202



Glenn favourite aircraft is the famous Focke-Wulf Fw190D9

How did you first get into the hobby?

Like a lot of our generation growing up in the early sixties, I was given kits for birthdays and Christmas, this was helped in my case by a fascination with aeroplanes and living in New Guinea, which was still littered with ex-WW2 wrecks, including aircraft and other stuff. I gave it away after school once I discovered cars and girls, but once the gloss wore off, I rediscovered my old hobby and now with the finances to do it justice, as the 16 year old modeller in my head was telling me to do. So...like just about everyone else from my generation that rediscovered their long lost hobby, I did.

Why do you still model?

The Pleasure, The pain!?, the challenge in trying to break new ground with each model. Also because of the overall investment in time and money over my whole life.

What's your favourite model you've built and why?

All the models I have built are my favourite at the time of build because every one has new techniques and challenges inherent in the build and finish, except those built purely out of box - no real challenge in the build, only in the paint and I can't eliminate scale 'tells'. A 'tell' is a visual indicator that something is out of scale, ie too thick propeller blades for instance. If I had to pick, probably the Henschel 123 as it is probably the hardest to pick for scale in a photo which is my aim, to eliminate the 'tells' for scale in a photo. Also to bring an old kit up to its potential.

What's your biggest modelling disaster, what happened?

No disasters really, just the level of scale detail being compromised by the physical limitations of the materials used, i.e. paint and decal thickness. Oh, a lot of my ground work on the display bases built over the last 20 yrs has started to react with moisture in the air and is crumbling and breaking up ?

Modeler Profile - Glenn Irvine



This stunning Ta152H-1 was crafted from the 1/72 FROG kit, that's right, the FROG kit. The cockpit walls were sanded so thin on the first effort to getting a correct cockpit, the first time Glenn used glue to attach components, the walls melted!!!



Little remained of the original Pioneer 1/72 kit in Glenn's efforts to get a faithful reproduction of the Horten Ho229

ABOVE: This P-51 Mustang was the subject of much discussion when presented for competition. Glenn utilised an interesting technique for the metallic surface by using aluminium foil boiled with eggshells at varying timings to obtain differing effects.

What kit/s would you like to see released?

“The perfect model, but then, would there be any challenge to building it ?”

Modeler Profile - Glenn Irvine



Not just aircraft

Left: Glenn reveals a darker side...

Right: At least this model has wings!

Below: Apart from aircraft, Glenn is rather adept at fantasy figure painting as seen with this stunning mermaid



What are you working on now and what's your modelling schedule like generally?

I am working on a 1/72 scale Heller Tempest, no, I am not using the Academy kit, it is quite inaccurate. Also have the Zoukei-Mura Ta 152 in 1/32 scale which I am planning a build on as one of the prototypes. As for schedule...what schedule? I build when I am in the mood to a level that satisfies me which is sporadic at best and takes years to finish anything.

Are you a kit hoarder/ collector or do you genuinely intend to build everything you have and how big is the current collection?

I have a large, for me, slowly growing collection like most modellers, I have plans for every one of my models..... one day.....Also I am a modelling optimist? I also wanted to own a model shop when I was a kid, doesn't everyone?

What is your modelling collection made up of?

Mostly WW2 aircraft, primarily Luftwaffe in 1/72, 1/48 and 1/32 scale. There is a smattering of other stuff, allied, Japanese and Italian aircraft, AFV's in 1/76, a car or two, some Sci-Fi, a few figures, a sailing ship and a lot of resin accessories and decals.....Oh, and books, lots of books and magazines. There is probably more money invested in the reference material than the models to be truthful.

What kit/s would you like to see released?

The perfect model, but then, would there be any challenge to building it ?

Do you build anything other than aircraft, if so, what?

I will build figures, cars, AFVs, anything, I just don't have time to do all I would like, so most of my work is aircraft.

I also love the challenge of groundwork and building a diorama is an unrealised ambition of mine.

Is there a modelling technique you still feel you haven't developed to your satisfaction yet and if so, what is it?

My painting and weathering, as because my models take so long to finish I use this skill so infrequently, that I am out of practice every time I have to finish a model, and I am always trying new techniques and developing the skills I have. But I wish I could be more motivated when I do have time to model.

What are your top ten aircraft of all time?

For no particular reason other than I like them, Spitfire, 190 D, 109, Tempest, Ta 152, Bearcat, Mosquito, Ju88, DC3, Zero. and lots of others.

If you could change anything about the hobby, what would it be?

The hobby today is everything any of us modellers could want, except maybe for a greater emphasis on accuracy of shape from the manufacturers, as there really is NO excuse today. But for the hobby, I wish the hobby could access the kids of each generation in more volume. For me, Bring back original formula Humbrol Authentics paint and Aeromaster enamels and classic Airfix series 3 box art and packaging.

Where do you see the hobby headed in the future?

Not good, we are a dying generation, those



Glenn has a particular affection for a well detailed cockpit, no closed canopies for him as seen on this 1/72 Zero.



With no detail too small, this 1/72 Arado Ar234 has a host of scratchbuilt accessories. Although not visible in this shot, there are tools in that tool chest!!!

that grew up on Airfix , Frog, Revell and Monogram, are dwindling and there doesn't appear to be the volume of new modellers to take our place. I feel the golden years are here now and the swan song is just around the corner for the manufacturer. The hobby has been very lucky to benefit from the advent of new technology in the manufacturing sector that has allowed the price of developing moulds for new kits to drop so that new kits do get made, this is allowing us to keep seeing new kits for as long as there are enough of us cashed up baby boomers out there that it keeps it profitable for the manufacturer. Once that stops happening new kit manufacture will dry up. There will always be modellers, but the quantity in the population will slowly drop over the next 10 to 20 years and reach a new baseline which will determine the viability of the manufacturers in the long term.

What advice would you give to someone considering getting into the hobby?

Go for it, just build kits and enjoy it. Don't get disappointed by the standard you achieve when compared to the Master modeller, they took many, many years and lots of models to get where they are. Now days there are enough shortcuts in terms of accurate well detailed kits, accessories and detail sets and help from experts both in print and on the web and in clubs that anyone with a bit of patience and care can build something amazing.

Finally, what do you do for a living and how do you fund your hobby

I am a Mercedes technician (mechanic) and I buy when I feel the need to add to my must have's list and I can afford it. This is not that often as I try to be a bit rational with my spending and I already have most of what I want. I only buy models that are of subjects that I have not got in my collection that I want that haven't yet been kitted, or newer mouldings that are better than kits I already have. Or, just because I like it..... Don't you?

Those WNW and Tamiya 1/32 kits are looking good.....must.....rationalize....spending....resist.....temptation....pay for food first.....hang on, if I don't eat this week?....:)

Web Watch

There's a lot of helpful sites on the web with great reference and information to assist you in your current or future, masterpieces. Here's a sample of what we've found...

HyperScale has become a modelling institution since it's inception in 1996. The site has grown from a small Australian based site, the brain-child of Sydney modeller Brett Green, displaying the talents of a small band of like minded modellers.

In 2011, HyperScale is a global modelling home site for literally thousand of enthusiasts across the globe. Ironically, the web based magazine threat to which HyperScale was a key element has seen it's creator and editor Brett Green move into the traditional paper-based publishing world in key roles in book and magazine production.

HyperScale is dedicated to aircraft and armour modelling and comprehensively covers these topics with updates most weekdays to the review and gallery databases and a range of well moderated forums dealing with kit building, swap & sell and group builds.

If you're an aircraft and / or armour builder and for some reason you've not been there before or perhaps it's been a while... don't hesitate!

www.hyperscale.com

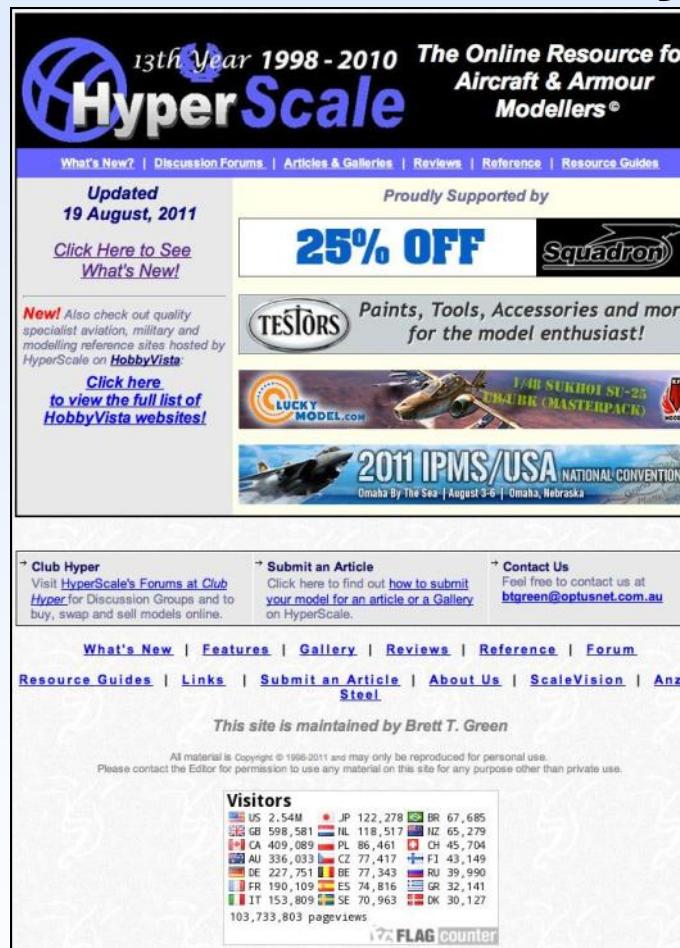
Following are some questions put to Brett that he's kindly responded to. A big thank you goes to Brett as he is incredibly busy at the moment and we appreciate him taking a few moments out from his busy schedule. Thanks Brett!!!

Let's start with the obvious question, what motivated you to start HyperScale, also, it has become a benchmark for modelling sites / web-zines, what's your purpose behind the site?

I started HyperScale because, back in late 1997, I wanted to publish some of my research and my model photos online and there didn't seem to be an appropriate website to do so. I had been submitting articles on my armour models to **Track-Link** www.track-link.net for a year or two, but there did not seem to be an equivalent site for aircraft modellers.

It appears you run HyperScale as a one-man outfit, is this the case and if so, why?

HyperScale is a one-man band from the point of view of administration, web design, regular uploads and maintenance, but there are a number of other key people. My wife is a partner in the business and



she takes care of all the accounting and tax issues, which is a big load off my shoulders. I have a fantastic ensemble of reviewers, many of whom have been with me for well over ten years. And of course, HyperScale's contributors always come up with interesting and unique model articles and galleries.

If there is one aspect of HyperScale that you are most proud of and or rewarding, what is it?

I am pleased that we are still attracting new visitors, and inspiring people to have a go at modelling, or stretching by experimenting with new techniques and new subject areas.

HYPERSCALE HISTORY SPECIAL ISSUE

There is always a darker side to even the best of things, what are the aspects of running the site that drives you nuts?

The occasional immature thread on the Forum pops up, which can be frustrating. The job is pretty much non-stop too – seven days a week, 365 days a year – but fortunately I love what I do.

Are there any particular contributors whose work never ceases to amaze you?

The work of my friend Chris Wauchop is a perpetual eye-opener. His models look amazing in photos, but you should see them in person!

What are the models you've featured on HyperScale over the years that stand out to you?

Tamiya's 1/32 scale P-51D Mustang, which I have just finished, is the most amazing model that I have ever built. Other standouts include Revell's 1/32 scale Ju 88 and Dragon's big Bf 110.

You've covered many international model shows, are there any "Tales From The Road" you can tell us about?

Ah Martin, what happens on the road, stays on the road!
Ed. Come on Brett, looks like we need to have a loooong coffee next year at Expo!!! :-)

By starting HyperScale, what do you think you've gained as a modeller?

I think that seeing so many high quality models crossing my desk has opened my eyes to a lot of different techniques. I have also been exposed to many subjects that I might not have considered beforehand.

In the last issue of AERO-TORQUE, we had an insight into you as modeller, but what about Brett Green as a person? Are there any characteristics or traits you see in yourself that shape you as a modeller?

Nothing in particular. I am really just an average modeller with an unrivalled opportunity to practice my hobby!

Web Watch cont...

HYPERSCALE HISTORY SPECIAL ISSUE

What other hobbies provide time away from modelling?

I started to learn to play guitar about 18 months ago, and I am loving that. I have coached my son's junior cricket team for the last five years. I also hold a Recreational Flying Certificate with cross-country, passenger and radio endorsement. I picked this up when I ran out of money to finish my PPL navigation training.

Have you been able to get your kids into the hobby?

No. My wife insists that one obsessive in the household is already one too many!

Significant technology changes have occurred since 1998, how has this affected the publishing of HyperScale and are there any limitations presently you're seeking to overcome?

The main difference is that I don't have to worry so much about large file sizes. It is no longer a problem to publish an article with lots of big photos, as the vast majority of visitors will have broadband internet connections. Same goes for videos too.

You have become heavily involved in traditional publishing ventures, how do you see the future of paper publications in our hobby?

I think there is still a place for paper publications, particularly reference and "how-to" books. There will be a hybrid road too, with a familiar book-like layout on tablets such as the iPad, but I believe that people in general and modellers in particular will still want to have certain books and magazines folded open on the workbench or accompanying them to the smallest room in the house.

Are there any changes to the HyperScale formula you are planning on or would like to do at some stage in the future you can share?

My philosophy is, "if it ain't broke, don't fix it" and my impression at the moment is that it ain't broke. The only two things that I would really like to do is get the Indexes up to date and introduce a proper search function, but these are beyond my resources at the moment.



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Bookmarks

Recommendations for your library

Warpaint #83 - Fairey Battle

by William Harrison

Warpaint Books

Softcover, A4, 52 pages, 6 colour & 147 b&w photographs, 36 colour profiles, 1/72 scale drawings.

Another in the ever expanding Warpaint series, with this and the last few having a much more hard wearing gloss cover than the matt paper cover of old. Contained within are a brief development history, prototype testing, manufacturing at both Fairey and Austin, and the various engines used in production variants.

Along with the standard Merlin I, II, III, IV & V production engines, the Battle was also tested with Bristol Taurus and Hercules, Fairey P.24, Napier Dagger and Sabre, Rolls-Royce Peregrine and Exe, and Wright Cyclone G3B's. All are listed, most with photo's and a small history. It's brief front line combat history is also recorded, as well as "foreign" usage (including the RAAF) and it's numerous other roles such as flight training and target towing.

Lists are included for squadrons and units that used the Battle, a complete production list and a pretty slim kit listing. The three "In Detail" pages comprise 22 photographs and are a start for the modeller. Good value again.

Available from AeroWorks at \$27.50

Windsock Datafile #146 - Pfalz D.XII at War

by Colin A Owers

Albatros Productions

Softcover, A4, 40 pages, 15 colour & 138 b&w photographs, 6 colour profiles.

This latest Datafile is a timely release from Ray Rimmell and the crew

at Albatros considering the soon to be released Wingnut Wings 1/32 Pfalz D.XII. Collusion ? Yes, thank goodness there is, and I have absolutely no problem with it. For those of you new to First World War modelling, the Windsock range have been around for 20+ years now and are in many cases the only source of published information on relatively obscure aircraft from the 1914-1918 war. Development

history and trials are covered, as is a complete written description of the aircraft, camouflage and markings, a very brief combat history and a survivors listing. The joy in a lot of these datafiles are the photographs. In this instance, not only has the Australian War Memorials nicely restored example been captured with 15 colour photo's, but many of the period black and white shots are of the aircraft being manufactured, or transported, or undergoing maintenance. A lot of them much crisper than corresponding World

War II German photographs and are of a great help to the modeller. The seven pages of 1/48 and 1/32 scale and technical drawings are beautifully done and the 58 black & white in-detail photo's of bits and pieces bring up the rear. Regardless of how good the Wingnuts kit will be you will need this book to get the most out of the kit.

Available from AeroWorks at \$25.50

Spitfire! - The Experiences of a Battle of Britain Fighter Pilot

By Brian Lane

Foreword by Dilip Sarkar MBE

Amberley Publishing

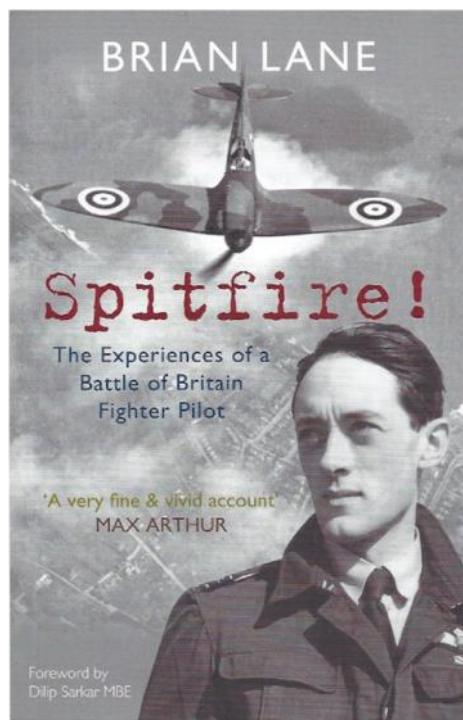
Paperback, 192 pages, 198 x 124mm format. 44 b/w photos.

For the debut issue of the Warbirds AMG journal, we featured a profile on Brian Lane, an RAF Battle of Britain pilot. In researching Brian Lane I came across an earlier edition of this book, an account written by Brian himself and later re-released with a foreword by noted Battle of Britain historian and author Dilip Sarkar MBE. www.dilipsarkarmbe.co.uk

A fascinating read, this paperback provides, as the title suggests, the experiences of a pilot in this era of aerial warfare. It would be fair to

say that over the years, many accounts have been recalled and written with a certain, shall we say... flair. Brian Lane's account written during the conflict is a poignant, honest and clear account of a young man, tracing his career from his civilian working background in 1935 through his training and subsequent military service. The book tells the story of a man, a pilot, a leader and a gentleman. This is a book

with a multi-dimensional appeal with a rare balance of detail and historical significance blended with just the right amount of humanity to appeal to a broad audience. Lost over the North Sea in early 1943, Brian Lane had completed his book however on that day, not only did the RAF lose a fine fighter pilot, we lost the source of further fine accounts of the experiences of a World War II fighter pilot.



It must be noted, the text has not been edited for political correctness therefore references made in the book may be confronting to some. It must be remembered the account was written during the conflict and in context with the time was not considered offensive. A comprehensive and detailed foreword by Dilip Sarkar MBE sets the scene for this book and is a must read before embarking through the pages of Brian Lane's account. Dilip has meticulously researched the text filling in the gaps created by the censors of the day via a listing of the codes and their meanings. Additionally, Dilip has supplied 44 black and white photos to assist in the telling of this insightful account. Most readers will get through the book in short time and like me I'm sure will be disappointed it's over, I suppose that's possibly the highest compliment a reader can pay an author and in this case, that compliment is well deserved. Highly recommended to modellers, historians and lovers of a good read regardless of the subject matter.

Many thanks to Amberley Publishing for the review copy

£9.95 / \$19.95 US RRP from www.amberleybooks.com
plus postage available online from Amberley Books

TAIL SPIN

And another period of intense modelling with incredible quality output of the highest quality goes by... Not quite!

All is not lost because while it most certainly wasn't my most productive time model wise, plans are in place finally after many failed attempts, to extend our humble abode including a dedicated room for my hobbies, WOOHOO!!!

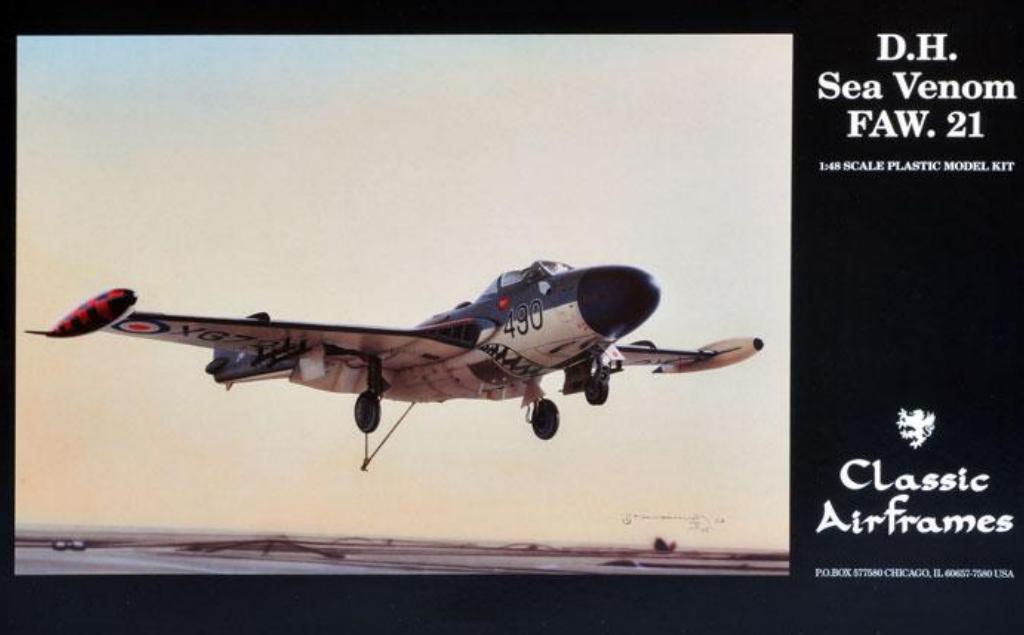
While I won't get ahead of myself everything is looking good and I may just have one of the pieces of the great modelling dream... A dedicated place to build and display the objects of our affection.

That doesn't mean I've done nothing. We have out Group Build under way now and I nominated my Classic Airframes Sea Venom so that's underway. Black 490, an impressive shark-mouth has long been one of those "one day" build and with the

release of this kit a few years it was a done deal despite its hefty price tag. Why oh why did it have to be released when the exchange rate was in the toilet? Not to worry, it will soon be three dimensional although given the Group Builds are due mid next year and that's when the extension, all things going well, is due to be completed around March—April so it's likely to be the first model I finish in my "man-cave".

Another new build on the go is my 1/48 Hasegawa Bf109E night fighter in the all-black scheme. I've searched high and low for pictures of this aircraft with no luck. If anyone can point me in the right direction I'd be most appreciative.

The kit has been sitting the collection for a few years now while I've been trying to get the Owl 1/48 update kit with better decals and more accurate resin and photo-etch radar dome for underneath



CONFESIONS OF A TIME POOR EDITOR

the fuselage. In addition, there is an updated rudder with an extra trim tab and what look possibly what may be radar dipoles. While the castings are crisp, the instructions don't give too much away, particularly in relation to colours. It's these things that can drive a modeller with OCD tendencies to distraction.

I had ordered it but it was always out of stock and wherever I looked it was either out of stock or available from places I wouldn't trust with my credit card details...

Late on the last day at Model Expo, I was flicking through the resin detail sets at the Aeroworks stand and there it was in all its glory so I presented it to Craig to add to my next credit card debit along with an early model Hurricane in 1/32 scale from Pacific Coast Models. This was a kit I eyed off the year prior and then regretted not buying so this time it



Messerschmitt Bf109E 'NIGHT FIGHTER'

didn't get away! So it was a successful Model Expo with my purchases and with the club display, perhaps next year I may even enter a model for the first time in years, but then again why ruin my own distorted perceptions of how good a modeller I am? Come on people, if I can't deceive myself, then who can I deceive?

Martin

NEXT ISSUE

CarAIRcatures

by Glenn Irvine

Cavallino Rampante!

Macchi Mc202



AERO-TORQUE



WARBIRDS AMG - 2011