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NEWSFLASH
December 2020

International Plastic Modelers' Society/USA
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Applications should be printed and mailed to: IPMS/USA, P.O. Box 1411 Riverview, FL 33568-1411

Hello Swamp Foxes, Welcome to the December 2020 Newsletter.

I hope everyone is keeping well and in good health, Hopefully still building.

My building has resumed and I am feeling much better now as I continue my recovery and work continues on Hms Roberts and Sikh, Abercrombie has also joined the bench, more on that in Members Models.

Stay Safe, Hang in there and .....

Keep on Building

From the Front Office…

Howdy, all!

This month's meeting is scheduled. The 4-1-1:

Topic: IPMS/Mid-Carolina monthly meeting Time: Dec 16, 2020 06:00 PM Eastern Time (US and Canada) Join Zoom Meeting https://us02web.zoom.us/j/86520298481?pwd=ZjFjdERGNzIwZ0F3Mm9DSmMreXgxQT09 Meeting ID: 865 2029 8481 Passcode: 321022

I hope to see everyone there. I know it is certainly not the same as meeting in person, but we're doing the best we can to play the hand we're dealt. With the advent of COVID vaccines on the horizon, I hope things get better before too long. Until then… I have sent the Chapter re-charter in to IPMS/USA, so we're good for another year. I have also requested a check from Tom Wingate to pay the IPMS/USA memberships we all agreed upon before COVID turned the place upside-down. Once I receive the checks, the membership forms and the check will go to Marie for processing. All of you who paid your 2020 dues will get a one-year membership to IPMS/USA. If you already have a membership, it will be extended by one year.

We're starting to get geared up for a possible show in 2021. As you recall, we had to postpone, and then cancel, our show for June 2020. We're basically going to take the prep work we did for this year and re-use it for next year—including the theme. We are also looking at adding a second theme to the show, too, so stay tuned. Of course, any show planning will be predicated on the COVID situation. Again, with the vaccines on the horizon, I would hope the world could then get back to normal, but we'll have to wait and see... At this point, the Armory isn't certain when they'll be able to start renting the place out. We are on the list for the weekend of 18/19 June 2021, but should the Armory still be unable to rent, we're looking at other venue options within Columbia. Accordingly, we've begun to look for an alternate venue. We've already reached out to Explore Columbia (the former Convention and Visitor's Bureau) to see what they may be able to do to help us.

In closing, I would like to wish each and every one of you a safe, healthy, and happy holiday season! Merry Christmas, Happy Hanukkah, and Happy New Year! Cheers!

Ralph

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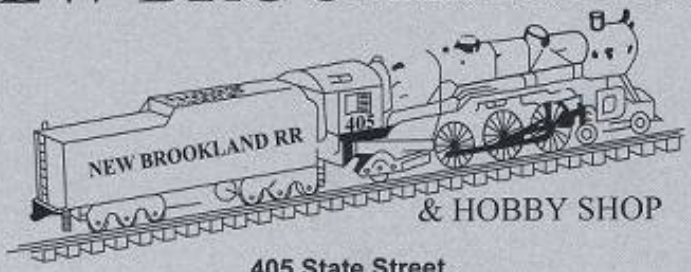

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German Armor in the Golan Heights

The last appearance by WWII German tanks on the world's battlefields came in 1967, when Syria's panzer force faced off against modern Israeli armor. Quite improbably, Syria had assembled it's collection of ex-Wehrmacht vehicles from a half-dozen sources over a decade and a half timeframe.

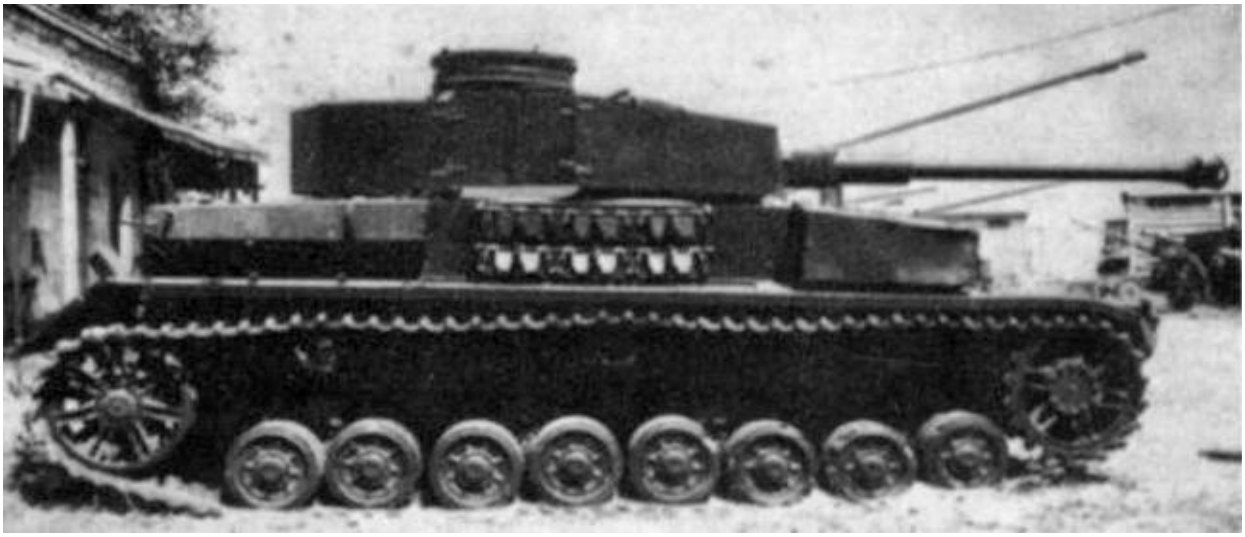
Captured *Syrian army Panzer IV tank* in Israeli museum

The Panzer IV (PzKpfw. IV)

This was the most common German tank during WWII. It served the entire conflict from start to finish. It underwent great evolution during it's production run, being made in ten main versions. The Panzer IVs Syria operated were of the late four versions.
All of the Panzer IVs Syria used had the "long-barrel version" of the Rheinmetall KwK 40 gun which could penetrate a M4 Sherman's armor at ranges up to 1,000 yards under ideal circumstances. The WWII-era TZF.5f gunsight was retained by the Syrians. A full ammo load was 87 rounds. There were two secondary machine guns, either MG-34s or MG-42s, one coaxial and one in a ball mount in the tank's nose.

The PzKpfw. IV weighed 27 ½ tons and was 19'5" long (23' including the gun barrel). It had a 5-man crew. The armor varied, being 3" on the glacis and turret face, 1¼" on the sides, and ¾" over the engine compartment's rear. The electrically-traversed turret was offset about 2½" to the left to counteract a slight rightwards orientation of the engine. A snubnose 92mm barrel in the roof allowed the firing of smoke grenades or signal flares.

The Ausf J version, made by Germany late in the USA's bombing offensive, lacked some features including the 92mm launcher and the turret drive motor; relying solely on the emergency handwheel. This version also had solid-steel roadwheels, making driving on pavement unpleasant for the crew.



Panzer IV Ausf H of the Syrian army. The spare tread links were both a breakdown recovery item, and added a bit of extra armor for the crew. A few links were carried on the right side, and more on the front glacis.

Syrian Panzer IV Ausf H captured by Israel. Most military historians consider this the best of the Pz.Kpfw IV models.

The powerplant was a Maybach HL 120TRM 12-cylinder, 296hp gasoline engine. All of the Syrian Panzer IVs had the SSG 77 six-speed transmission. The Panzer IV had leaf spring suspension, which, by the time of the final versions like Syria used, was at it's limits with the added weight of the modifications. The maximum speed was 26mph but by the 1960s, these tanks were rarely driven faster than 10mph due to their age and the overloaded suspensions

This Panzer IV Ausf J was captured intact by Israel in 1967 and today is a monument in Migdal Ha Emek, Israel. The Ausf J was actually a step backwards from the Ausf H version. The green rustproofing paint was added by the town and is not authentic.

From France

The number of Panzer IVs from France is uncertain. One source lists 40 being delivered, while others state the the 40-vehicle total Syria got from France was a combination of all German types including Panzer IVs, and the number of ex-French Panzer IVs was only 11 or even less than that (one source says only 5). Yet another source says that indeed 40 were delivered, but, by the time of Syria's second round of WWII German weapons imports later in the 1950s, only a handful of the French-delivered Panzer IVs remained functional.

As listed in the somewhat muddled French export records, all were of the Ausf H version however some may have been of other versions. reportedly one was a "Frankenstein" with the Ausf J hull, suspension, and propulsion; mated to an older Ausf D turret but with the "long-barrel version" KwK 40 shoehorned in. France's Panzer IVs were either battlefield recoveries or captures, and all had obviously seen action during WWII. The French tanks had seen some post-WWII use by the French army and a number had been repaired using pieces of other wrecked Panzer IVs. Some were missing equipment, notably the bow machine gun.

The French Panzer IVs belonged to the short-lived Besnier independent armor squadron, a hodgepodge of German, American, and French vehicles assembled during the country's 1944-1945 liberation. Unlike the PzKpfw. V Panther (which equipped two post-WWII frontline French army regiments until 1950), the French had little interest in the Panzer IV and these tanks had likely been

sitting in warehouses since late 1945. The date of the transfer is uncertain but was probably in 1950 or 1951. After the 1948 Israeli War of Independence, the French attempted to remain allies with both Israel and Syria. To that end, an attempt was made to “balance” a weapons sale to one side by an offer of something else to the other. As the Panzer IVs were just collecting dust anyways, they made an ideal item to offer Syria.

Panzer IVs of the French army’s Besnier squadron in 1945 .

From Czechoslovakia

Immediately after Germany’s collapse in May 1945, the Soviet army established a staging area for surrendered German tanks at a former Wehrmacht barracks at Milovice, about 24 miles north of Prague, Czechoslovakia. By January 1946, a total of 165 operational Panzer IVs of varying versions were at this facility. Joining them was a huge cache of spare parts found at a former German tank repair depot in Teplice, along with ammunition collected from all over Czechoslovakia and the southern extremity of the Soviet occupation zone in Germany. Throughout 1946, the Czechoslovak government’s clean-up of WWII battlefields recovered another 102 Panzer IV wrecks, of which 80 were pieced back together to operational status. By January 1947, a total of 245 Panzer IVs were operational, now transferred to the Czechoslovak army.

These Panzer IVs were not segregated by variant and were of the Ausf D, G, H and J versions; and it was not uncommon for them to be “half-breeds” between the types, especially those repaired after WWII.

In early 1948, the now-nationalized CKD Works began a limited upkeep of the tanks, many of which had not had depot-level overhauls since the war. A few were rebuilt with a Czechoslovak-designed steering system, but this effort was halted due to cost. These Panzer IVs remained operational in the Czechoslovak army until the end of 1954, when sufficient T-34s were available to phase them out.

A "half-breed" Panzer IV which Syria bought from Czechoslovakia. It has components of both the Ausf H and Ausf J versions. This individual tank had a remarkable life. It first served with the Wehrmacht on the Ostfront, then was captured and placed into service with the Soviet army, who used it in combat against the Germans in 1945. It was then transferred to Czechoslovakia which later sold it to Syria. In 1967 it was captured by Israel, and today is in an American museum which has repainted it in WWII German colors.

A Syrian military delegation visited Prague from 8 April – 22 April 1955. An agreement was struck for the sale, amongst other items, of 45 Panzer IVs. Despite their obsolescence the Czechoslovaks were not about to just give the tanks away, and demanded payment in a 'hard' western currency, namely British pounds. The cost was £4,500 each (£86,000 or $112,850 in 2016 money), far above what they were probably worth militarily, especially considering the limited amount of foreign currency reserves available to the Damascus government. The deal included refurbishment, a full ammunition loadout for each, and a limited number of spare parts. The tanks were delivered to Syria in early November 1955.

The Syrians were by that time already having problems keeping their French-sourced panzers operational, and in 1958, a second contract was signed for 15 additional Panzer IVs, these being in lesser condition or non-operational, for use as spare parts hulks. An additional 16 refurbished Maybach engines were also included in this contract.

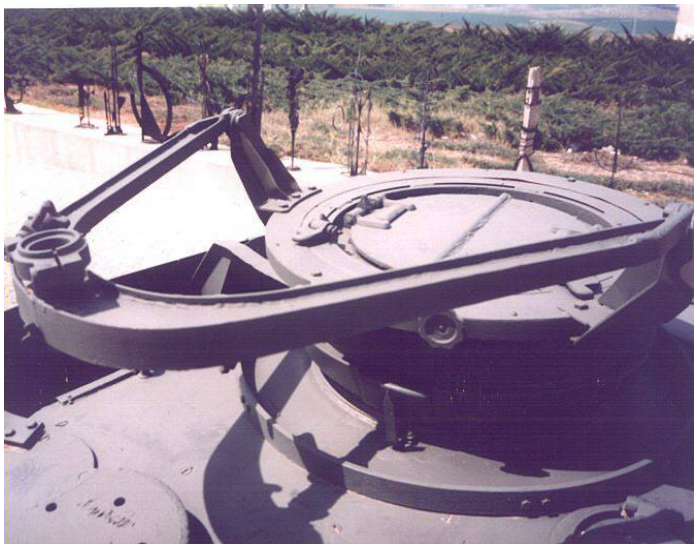
As they had been lumped all together in Czechoslovak army service, the Syrians received a mixed bag of versions, many of them "half-breeds" or "Frankensteins". Many had the bow machine gun removed; in some cases the coaxial gun as well. It doesn't appear that the Czechoslovaks updated the radio fit on these tanks.

Czechoslovakia restarted production of the Schürzen spaced turret armor kit. This was a ring of sheet steel plates set off from the turret. Today, this is often described as a German defense against HEAT rounds (as modern spaced armor is) however this is untrue; when the Schürzen kit was designed during the middle part of WWII, HEAT rounds were not commonly encountered. Instead it was intended to give additional protection against light anti-tank guns by slowing the incoming round and

altering it's trajectory before it struck the turret itself. The Schürzen had little effect against Cold War-era HEAT bazookas and anti-tank missiles, and was obviously of no use against tank gun rounds.

The Schürzen 8mm turret skirts on a Syrian Panzer IV captured by Israel in 1967.

The Czechoslovaks also delivered an adapter kit to allow use of their AA crescent mount for the Soviet-made DShK 12.7mm machine gun. This AA mount was developed after WWII for the T-34 tank. The adapter allowed it to be fitted onto the Panzer IV's commander cupola. These kits were fitted to all of the initial 45 tanks of the 1955 order and enough were delivered that some could be installed on a few of the Spanish- / French-sourced tanks as well.



The Czechoslovak-made AA mount for the DShK AA gun and it's adapter braces for the Panzer IV cupola.

For comparison, the AA mount aboard a Syrian T-34.

Inclusive of the cannibalization hulks, Syria received a total of 60 Panzer IVs from Czechoslovakia. At no time were all simultaneously operational and by 1960, usually only two or three dozen were combat-ready.

From Spain

For certain, seventeen of Syria's Panzer IVs came from Spain, which kept detailed export records down to the individual serial numbers. All of the Spanish tanks were of the Ausf H version, with the 75mm "long-barrel version" KwK 40 main gun. These tanks were part of a 20-vehicle order of Panzer IVs delivered to Spain during WWII in 1943. These were top-line tanks identical to the Wehrmacht version, and had all of the Ausf H features including the enhanced transmission, additional armor, and cast sprockets. When sold to Syria, they were all still completely in the original German WWII configuration. All were delivered to Syria in December 1965. The Spanish Panzer IVs had been immaculately maintained in Spain, and had never seen combat. These were the best of the lots which Syria operated.

Syrian changes

By the time of the Six Day War, very few of Syria's Panzer IVs still had the bow machine gun and according to the Israeli Defense Forces, some also lacked a coaxial machine gun. An IDF report on one captured Panzer IV said that it had a nameless "Soviet .50cal coaxial". The DShK 12.7mm machine gun was larger and longer than the German machine guns, would have been quite difficult (but not impossible) to shoehorn into the turret. A different (less likely) possibility is the Berezin UB, a Soviet 12.7mm aircraft gun of WWII. This gun was smaller and lighter than the DShK.
Regarding the bow machine gun, a very few wrecks examined after the war still had the WWII German weapon, while a handful had a Soviet Degtyaryov DS-39; a WWII-legacy Soviet 7.62mm machine gun

of similar size to the German weapons. The vast majority had no bow machine gun at all, with the ball mount either empty or plated over.

A captured Syrian Panzer IV Ausf J in Tel Aviv, next to a captured Egyptian T-34. This shows the empty ball mount for the bow machine gun. Reportedly, this was the Panzer IV which the IDF said had a Soviet coaxial machine gun retrofitted; the type of which was not disclosed.

It's unclear if the Syrians installed modern Soviet radios in any of their Panzer IVs. The WWII German Fu 5 radio required a dedicated operator (who also manned the bow machine gun); if a more modern system was installed not requiring a dedicated operator, this crew position could be eliminated altogether on tanks missing the bow machine gun.

The StuG III

The Sturmgeschütz III was an armored assault gun of WWII Germany. In English, "Sturmgeschütz" directly translates as "assault gun" and in fact this vehicle established the entire assault gun category when classifying military vehicles. The "III" refers to it's use of a Panzer III chassis; there was no I or II. This was the most-produced vehicle of this type by any of the Axis nations during WWII.

The assault gun concept combined the roles of self-propelled artillery and towed anti-tank guns. It's main weapon, the 75mm StuK 40 gun, could fire either HE fragmentation field gun rounds or armor-piercing anti-tank rounds. Compared to a dedicated tank destroyer, the gun's velocity was less but probably still sufficient (it could defeat the turret armor of a M4 Sherman at 900 yards). Compared to a normal artillery piece, it's range was less, but again sufficient. In turn it combined the attributes of both in one package. As envisioned, StuG IIIs would support attacks by taking out pillboxes, mortar nests, and light combat vehicles, while acting as a rally point for infantry. On the defense, it would lie in wait to ambush enemy tanks.

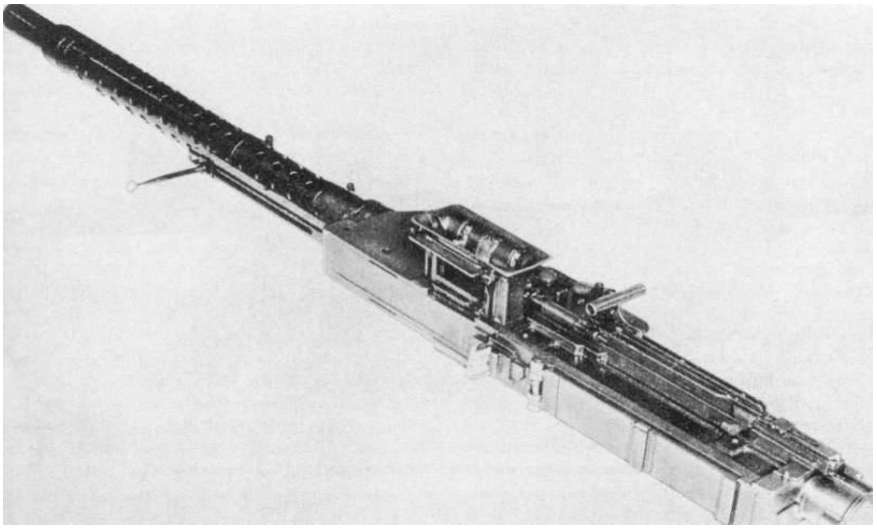
The StuG III weighed 26 ¼ tons and was 22’6” long. It had a 4-man crew. The 75mm StuK 40 gun had 54 rounds of ammo and a range determined by the target type and ammunition style used; usually not more than 2 miles and never more than 3 miles. The gun could only traverse about 13° to either side; beyond that the whole vehicle had to pivot. The secondary armament was a MG-34 machine gun in an anti-aircraft mount; some also had a coaxial MG-34. The StuG III was powered by a Maybach HL-120 12-cylinder gasoline engine and had a top speed of 25mph. The armor ranged from ½” to 3¼”, with the bulk of it on the front glacis.

A Syrian StuG III Ausf G captured by Israel in 1967.

Syria operated a total of 28 StuG IIIs at one point or another (never all 28 simultaneously). There were always about a half-dozen or so additional vehicles on hand as non-operational spare parts sources.

The Syrians modified their StuG IIIs by adding a pintle for a Breda SAFAT heavy machine gun. This air-cooled, belt-fed machine gun fired the 12.7x81mm(SR) cartridge at 700rpm with a 2,510fps muzzle velocity. The SAFAT was designed for either ground or air use, but was most famously employed as the wing guns in WWII Italian fighter aircraft. The Syrian air force operated some ex-Italian warplanes after WWII; when they were scrapped in the 1950s the guns were saved for reuse.

Syrian StuG III in the early 1960s with the locally-designed mount for the Italian SAFAT machine gun. Also of note, this StuG still has the WWII German "Zimmerit" anti-magnetic coating on; it can be seen clearly around the area scraped clean for the Syrian serial number. Zimmerit was a paste which tended to come off over time.



The Breda 12.7mm SAFAT machine gun out of it's housing. (official US Navy photograph)

From France

Syria bought nine StuG IIIs from France in 1950 or 1951. Like the ex-French Panzer IVs, these vehicles had belonged to the Besnier unit and, undesired by the post-WWII French army, were put into storage in the late 1940s. The exact submodel is unknown; most likely they were of the Ausf G version but possibly some were of the earlier Ausf F model.

The StuG IIIs from France were no doubt in the worst condition of the four source countries Syria obtained the type from. All nine had been used in combat by the Wehrmacht during WWII, and had received very little upkeep from the French afterwards.

from Czechoslovakia

Czechoslovakia obtained it's StuG IIIs similar to the Panzer IVs, as described above. Besides the Milovice collection point, the Germans had a specialized StuG III repair depot at Decin, Czechoslovakia which was captured relatively intact by the Soviet army in 1945, including some StuGs undergoing repairs. At the conclusion of the post-WWII repair effort, the Czechoslovak army had a peak strength of 126 operational StuG IIIs. Czechoslovakia retired it's StuGs in November 1953 and sent them to storage.

Twelve (plus the ex-Romanian vehicle below) Czechoslovak StuG IIIs were sold to Syria and delivered with the first batch of Panzer IVs in November 1955. All were of the StuG III Ausf G version. Unusually for Czechoslovak arms exports, fairly detailed records were kept on this deal and the Czechoslovak army register numbers (but not German serial numbers) are known. The price was £3,250 each (£61,513 / $80,664 in 2016 money). At the same time, another ten non-operational StuG IIIs were delivered for use as spare parts hulks.

Syrian army StuG III in the early 1960s. This shows the SAFAT mount in addition to the WWII-standard MG-34 mount.

According to one Czech military historian, in November 1956 another ten or twenty (the engines may have been counted separately from the hulls) degraded or non-operational StuG IIIs were delivered from Czechoslovakia to Syria for parts, as the Syrians were apparently having major problems keeping their StuGs running. If this is true, these probably replaced the ex-French vehicles in the twenty-eight total. They may have also accounted for some of the non-operational StuG IIIs the Israelis encountered buried as pillboxes.

From Romania

One Syrian StuG III was ex-Romanian. This country, when it had been an Axis ally during WWII, actually used the StuG III in combat. Like many of the Warsaw Pact countries, Romania briefly operated ex-German weaponry in the late 1940s and early 1950s. By most accounts, Romania had sent this StuG III to Czechoslovakia as the guinea pig for a possible modernization program to be done there; that in the end was cancelled. It was then sold to Syria and shipped along with the ex-Czechoslovak StuGs.

A StuG III during a communist parade in Bucharest after WWII, when Romania's roundel was an inverse outline of the Soviet star.

From Spain

Spain obtained a handful of these vehicles during WWII, at the same time as it's Panzer IVs. In December 1965, Spain sold six StuG IIIs to Syria. The StuGs from Spain were still in their original WWII German configuration.

The Jagdpanzer IV

Syria operated six Jagdpanzer IV tank destroyers, all of the original version. Only 784 of this version were built, all during 1944, before production switched to the more famous upgunned version.

The version operated by Syria had a PaK 39 L/48 75mm anti-tank gun with 79 rounds of ammunition. The Jagdpanzer IV was a "casemate"-style turretless vehicle. Compared to a tank, the advantage was that more armor could be concentrated forward. It also had a very low (6') silhouette. As it had no turret ring or traverse drive, it was also cheaper to build. The obvious huge disadvantage was that the

gun could only move 12° either direction; beyond that the whole vehicle had to pivot on it's tracks to aim.

Syrian army Jagdpanzer IV on parade in Damascus.

Like all "casemate"-style tank destroyers of WWII, the Jagdpanzer IV put as much armor as possible forward at the expense of everywhere else. The frontal glacis was between 2"-2 ¾" thick hardened steel and the massive gun mantlet was over 3" thick, but the remainder of the Jagdpanzer IV had 1 ¼" or thinner armor. Face-to-face, this tank destroyer was very formidable during WWII, but if it was outflanked faster than it could pivot on it's tracks (or surprised from the sides or rear) it was in trouble.

The secondary armament was a MG-34 machine gun with 600 rounds. The Jagdpanzer IV had a 4-man crew, and was powered by a Maybach HL-120 12-cylider gasoline engine with a top speed of 25mph. It had 99-shoe steel tracks of 400mm width, and leaf spring suspension. This was a clever and well-built vehicle, for example it could ford rivers as deep as half of the vehicle's own height.

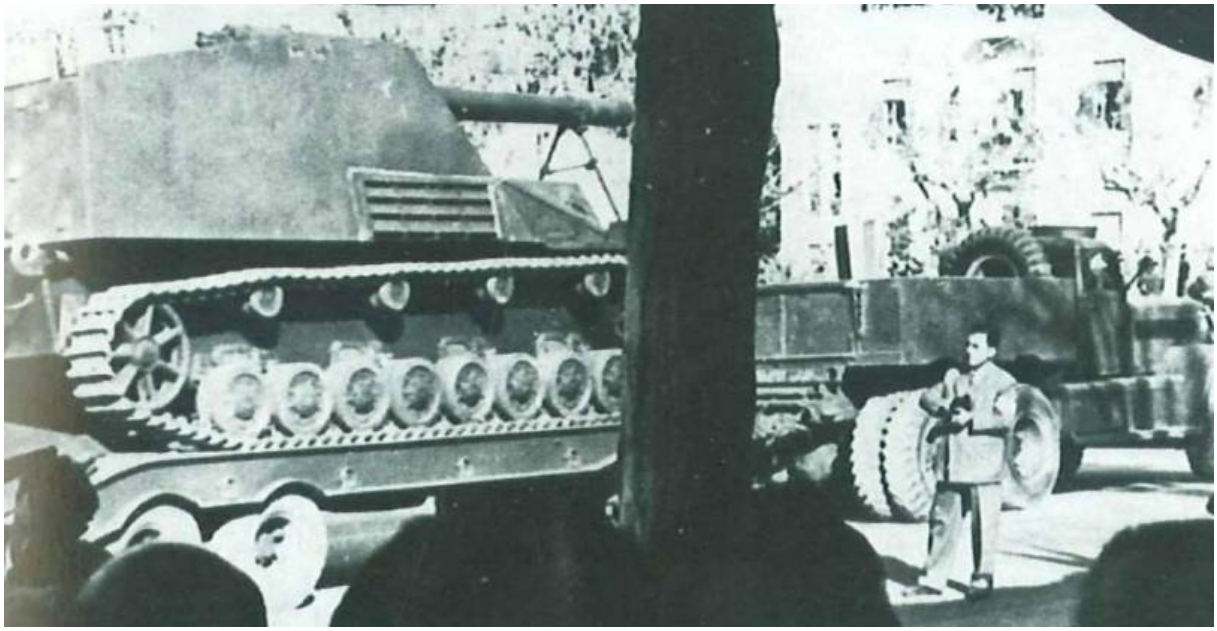
The six Syrian Jagdpanzers came from France in 1950. Presumably, they had been part of the short-lived Besnier unit, although it's possible they were recovered from battlefield clean-ups or even in the French occupation zone after WWII. The post-WWII French army had no interest in the type. They were lumped into a larger weapons sale to Syria that included artillery shells, small arms, and the such; and little else is known about the deal.

The Hummel (Sd.Kfz. 165)

Syria operated five Hummels. All came from France, and were delivered along with the Jagdpanzer IVs in 1950 as described above.

The Hummel (bumblebee in German) self-propelled artillery was developed during the middle part of WWII. It weighed 26 ½ tons. The main weapon was a 150mm sFH 18 howitzer, which

fired a 96 lbs HE shell to ranges of up to 8 ½ miles. Unlike earlier German self-propelled artillery, the “bottom half” was not a converted tank hull but rather a purpose-built chassis known as Geschützwagen III/IV. It was powered by a Maybach HL-120 12-cylinder gasoline engine and had a top speed of 26mph. The Hummel had a 6-man crew: the driver, the commander, and the 4-man gun team. Like most SPAs, the Hummel was not intended to face direct enemy fire and the open-top armored compartment was only about 1″ (or less) thick, sufficient only against small arms fire. A MG-34 machine gun was carried for emergency close-in situations.

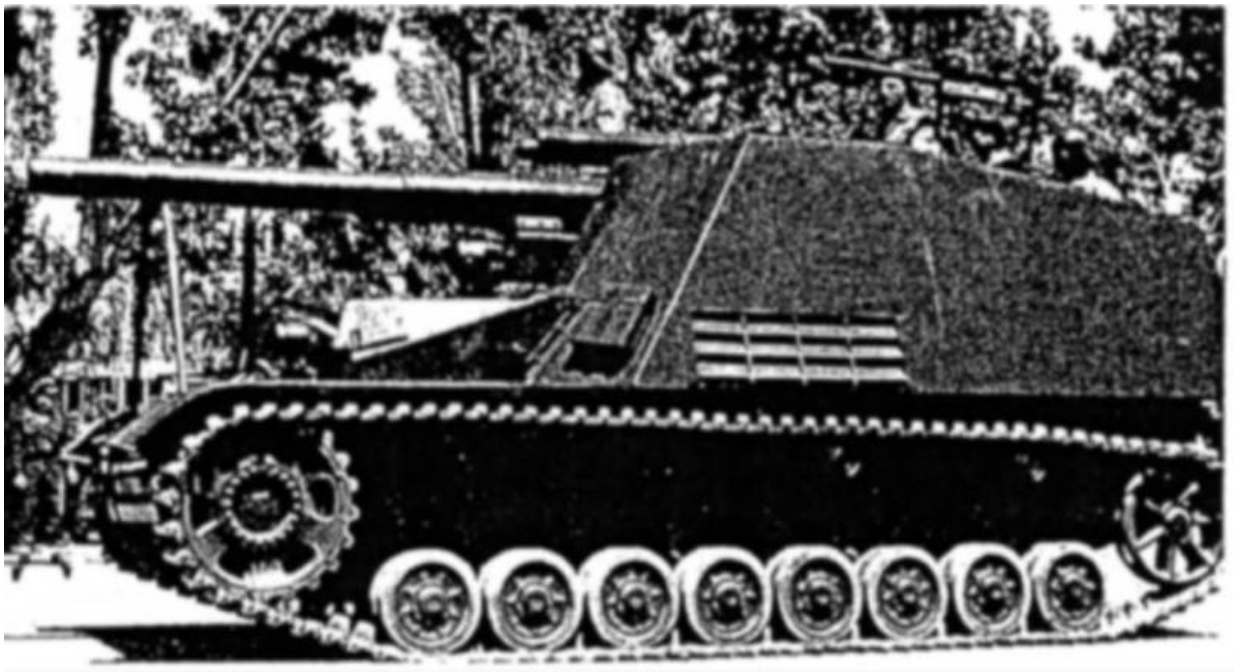


A Syrian Hummel aboard a tank transporter lowboy. Even by the late 1950s, the Syrians were doing everything they could to limit the mileage put on the aging WWII tracks and suspension.

One drawback was that only 18 howitzer rounds fit inside the Hummel. A specialized tracked support vehicle, the Munitionsträger H, was supposed to follow Hummels into battle but as the Syrians had none of these, ammunition replenishment would have been at the mercy of unarmored wheeled trucks.

Only a limited amount of captured German ammunition was provided by the French. During the 2014-2016 Syrian Civil War, WWII German 105mm leFH 18M artillery guns used by the Ahar al-Sham islamic rebels were observed firing shells with cyrillic markings, so it stands to reason that the Syrian Hummels were likewise filled with Soviet reverse-engineered copies of WWII German shells during the 1960s.

At least one of the Syrian Hummels had a WWII Italian Breda SAFAT 12.7mm machine gun installed in a makeshift AA mount, similar to those on the StuG IIIs as described above.



Syrian army Hummel with the SAFAT mount installed.

The Sturmpanzer II (Bison)

It's not entirely certain that Syria operated this self-propelled artillery at all. If it did, it would be quite remarkable as it was one of the rarest armored vehicles of WWII, with only fourteen plus one prototype known to have been built.

The Sturmpanzer II was a follow-up to the Sturmpanzer I (also nicknamed Bison) intended to give German artillery increased mobility. Weighing 17 ½ tons, it was merely the hulls of obsolete Panzer II tanks mated with 150mm sIG 33 howitzers. There was no armor for the open top compartment, only thin sheet steel to protect the 4-man crew from shell fragments. The Sturmpanzer II could go 28mph on paved roads but was limited to just 9mph cross-country. The howitzer's range was 2 ¾ miles and only 10 rounds of ammo were carried.

All fourteen were issued to the Afrika Korps in April 1942. Eight were destroyed in combat, and the other six were abandoned in 1943 due to mechanical breakdowns.

Of the six inoperable examples not destroyed in combat, several and maybe the whole half-dozen were recovered by the British army and moved to Egypt, where they remained after WWII ended. The Egyptians themselves (quite amazingly, considering the Bison's rarity and the size of the Sahara) recovered at least one additional wreck from the desert after WWII. From all these, three Sturmpanzer IIs were operational with the Egyptian army in 1948, where at least one saw action against the Israelis.

During the Six Day War, an Israeli military unit was adamant that they had destroyed one Syrian

Sturmpanzer II (the wreck was never found). Considering that the Bison's overall rarity, this might be doubtful; then again the Sturmpanzer II was such an obscure vehicle that it doesn't seem logical for the Israelis to even think of it unless they were sure that is what it was. During the 1958-1961 United Arab Republic era, both Egypt and Syria kept their armies distinct but there was a token nod to unity, and it's possible that Egypt sent Syria one of these relics. A rebutting opinion is that the "Syrian Sturmpanzer" never existed, and that the Israelis had maybe mistaken it for a SU-100 or a StuG III.

The carcass of an Afrika Korps Bison in the Sahara in 1948, three years after the end of WWII. This was almost certainly not the one possibly used by Syria.

Markings

Markings on a Syrian army Panzer IV.

Syrian vehicles of German origin were either painted in beige or a dark OD green. Almost all had the name of a Syrian soldier killed in a previous war on the turret in white. During the Six Day War, no national roundel was carried. However just as the conflict was starting, some had florescent red recognition triangles added. Syrian soldiers were notoriously trigger-happy and the decreased camouflage effect was likely cancelled out by the reduced odds of being blasted by a comrade.

Misconceptions

A myth is that Wehrmacht veterans trained the Syrians on the panzers or even helped operate them. By the time of the Six Day War, any German who had operated these vehicles during WWII would have been in his 40s or older. The last batch of German POWs had finally been released by the USSR in 1956 and few Wehrmacht veterans wanted to get anywhere near the Soviet military, by then Syria's main ally. There may have been a small East German military advisor team in Damascus during the mid-1960s (certainly there was a significant one by the time of the Yom Kippur War in 1973) but the communist regime in East Germany would have never sent WWII veterans on a sensitive overseas mission; and whatever aid East Germany was providing was to support Warsaw Pact-standard weapons, not WWII relics.

Another story is that after Syria's defeat in the Six Day War, some surviving panzers were shipped to Cuba (other versions place it before the war). This is untrue; for starters the Syrians were scrounging the planet for any weapon they could get their hands on and common sense dictates they would not at the same time be doling out tanks to the Caribbean.

Organization

Before the Six Day War, the Syrian army was surprisingly unorganized considering the amount of money being pumped into it. There was no unit larger than a brigade, and the whole Syrian army had a sort of "hub & spokes" system originating in Damascus, with every individual formation answering directly to the GHQ rather than a chain of command.

The Panzer IVs and StuG IIIs were in three independent tank battalions, grossly understrength, supporting the normal tank battalions of three infantry brigades (the 8th, 11th, and 19th) in the Golan Heights. The Jagdpanzer IVs were apparently in a separate independent platoon attached to a tank battalion operating T-34s and SU-100s. How the Hummels were assigned is unknown.

Syrian army Panzer IV and T-34 in the mid-1960s. During WWII these two tanks had of course been arch-rivals on the Ostfront. This photo shows the DShK in place on it's AA mount.

IN COMBAT

The Water War

This was not really a war but rather a series of skirmishes between Israel and Syria during the mid-1960s.
With increasing frequency starting in 1964, Syria emplaced tanks on the western slope of the Golan Heights, almost directly on the border, to fire down on Israeli irrigation workers and farmers in the Galilee region. Surprisingly (considering the small number available) Syria chose the Panzer IV for this task. It had no feature making it better or worse than any other tank; most likely the Syrians felt they were the most expendable tanks in their inventory as Israeli counterfire was expected. The panzers were in defilade (dug in) and not easy to shoot back at; due to their altitude advantage.

Syrian Panzer IV in defilade in the Golan Heights when they still belonged to Syria, looking down on Israeli farms in Galilee. This photo was taken after Israel overran the area during the Six Day War, and the tank had been abandoned for some time.

In 1964, Syria announced plans to divert 35% of the Jordan River's flow away from Israel, to deprive the country of drinking water. The Israelis responded that they would consider this an act of war and true to their word, engaged the project's workers with artillery and sniper fire.

In 1965, Israeli M4 Shermans inside Israel exchanged fire with the Syrian Panzer IVs above inconclusively. A United Nations peacekeeping team ordered both sides to disengage from the border for a set period of time to "cool off". The UN "blue berets" were detested and considered useless by both the Israelis and Syrians, and both sides used the lull to prepare their next move. When the cooling-off period ended, the Syrians moved Panzer IVs back into position. Now, the IDF had Centurion

tanks waiting for them, with their fire arcs pre-planned out. The Cold War-era Centurion had heavy armor, a high-velocity 105mm gun, and modern British-made optics. It outclassed the WWII panzers in any imaginable way and almost immediately, two Syrian Panzer IVs were destroyed. Others were abandoned by their crews and that was the end of the situation.

Syrian Panzer IV knocked out by an Israeli Centurion.

The Six Day War

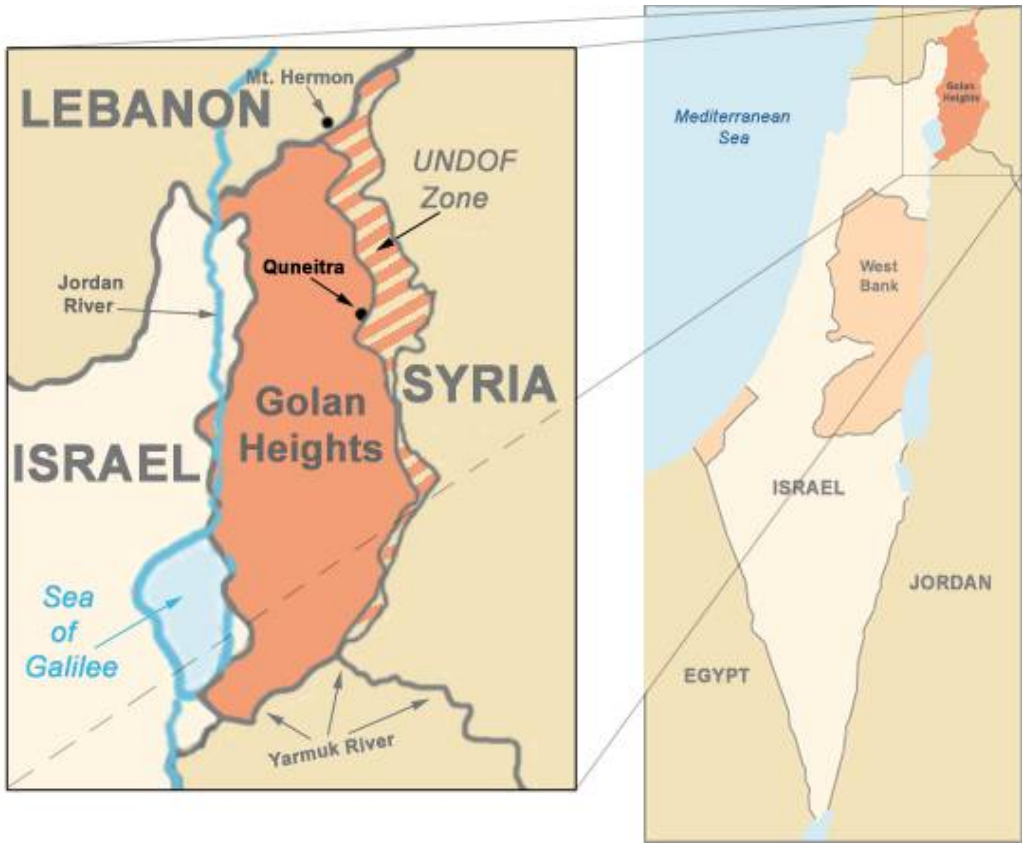
Syria's participation in this 1967 war was was sloppy and ultimately disastrous. Israel initially intended the conflict to be limited to a preemptive strike against Egypt to forestall an imminent attack by that country, with the possibility of having to fight Syria and Jordan defensively if they responded to the operations against Egypt. The war against Egypt started on 5 June 1967.

Because of the poor organization of the Syrian army, news passed down from Damascus on the fighting in the Sinai was scarce and usually outdated by the time it reached the brigade level. Many Syrian units (including the GHQ) were using civilian shortwave radios to monitor Radio Cairo which was spouting off outlandish claims of imaginary Egyptian victories, even as Israeli divisions were steamrolling towards the Suez Canal.

During the evening of 5 June, Syrian generals in Damascus urged the government to take advantage of the situation and mount an immediate invasion of Israel. Planning and preparation was literally limited to a few hours after midnight, and shortly after daybreak on 6 June, Syrian commanders woke up with orders to invade Israel. The three infantry brigades in the Golan, backed up by several independent battalions, were to spearhead the attack as the rest of the Syrian army mobilized.

In 1967, Syria's main tank types were the Cold War-era T-54/55, here in the foreground, the WWII-vintage T-34, and (in far fewer numbers) the Panzer IV, here behind the T-54/55. (photo via Manuel Litran)

There was no cohesion at all. Separate battalions began their advance whenever they happened to be ready to go. Brigades went forward missing subunits that lagged behind. A platoon attempting a southern outflank maneuver tried to ford the Jordan River in the wrong spot and was washed away. According to the KGB, at least one Syrian unit "exhibited cowardice" and ignored it's orders altogether.



On 7 June, 24 hours into their attack, Syrian forces had only advanced 2 miles into Israel. On 8 June, the IDF pushed the Syrians back to the prewar border and that afternoon, Israeli units eliminated the last Egyptian forces in the Sinai and began a fast redeployment of units back into Israel. Now the Syrians were facing serious problems.

Wreckage of a Syrian Panzer IV in the Golan Heights in 1967. Spent shell casings are around the tank, indicating it got some shots off before it's destruction.

On 9 June, Israeli forces crossed into the Golan Heights. They came by the route the Syrians least expected, an arc hugging the Lebanese border. Now for the first time, Syria's panzers (considered too slow and fragile for the attack) were encountered. The next day, 10 June 1967, was an absolute rout as the Syrians were being attacked from behind by IDF units arcing southwards from the initial advance, plus Israel's second wave coming from the west. It was later estimated that Syria lost between 20-25% of it's total military vehicle inventory in a 15-hour span on 10 June. A ceasefire was announced at midnight, ending Syria's misadventure. Syria permanently lost the Golan Heights to Israel.

A pair of destroyed Syrian Panzer IVs in the Golan Heights after the Six Day War.

Syrian Panzer IV abandoned by it's crew in the Golan Heights. The spraypainted "94" was applied by the Israelis after the ceasefire, during a census of destroyed vehicles to estimate how much damage they had inflicted on the Syrian army.

Fate of the Syrian ex-German WWII vehicles

Syria had about two dozen StuG IIIs operational on 6 June 1967, plus another dozen or so non-operational. During their advance into the Golan Heights, the Israelis found that most had been put into defilade positions. Meanwhile others, perhaps from the non-operational total, had previously been half-buried as makeshift pillboxes in strategic locations.

Destroyed Syrian StuG III in the Golan Heights. This was one that had been half-buried as a makeshift pillbox before the war.

Three Syrian StuG IIIs were confirmed destroyed by Israel, no doubt there were more. One operational StuG III was captured intact and taken to Israel as a trophy. Many more, perhaps the remainder of the operational quantity, were sabotaged then abandoned by their crews during the 10 June rout when it appeared that the whole Syrian army might be encircled. The StuG III was never again mentioned by the Syrian army.

A UN peacekeeper atop a knocked-out StuG III after the Six Day War.

The StuG III which Israel captured intact in 1967, here at an Israeli museum in 2004. (photo by David Pride)

Little is known about the Hummels, of which five were in active service on 6 June 1967. One Israeli intelligence assessment concluded that all five had mechanical problems and could not be mobilized before the war ended. It was considered that alternatively, they were destroyed by IDF counter-battery fire beyond the ceasefire line, where their wrecks could not be seen. Like the StuG III, Syria never again mentioned the Hummel.

Syria had six Jagdpanzer IVs operational on 6 June 1967. One was destroyed by an Israeli tank. Surprisingly, the remaining five were retained by the Syrian army. They made no appearance during

the 1973 Yom Kippur War. During the Desert Shield / Desert Storm period in 1990-1991, when Syria and the USA were briefly allies, the remaining five Jagdpanzer IVs were listed as “arsenal-level (long-term warehoused) assets” at al-Zabadani army base north of Damascus. In the mid-1990s, the late King Hussein of Jordan (an avid tank history fan) attempted to buy one or all of them for his army’s museum collection, apparently without success. During the 2014-onwards Syrian Civil War, they were likewise not seen, so apparently they had either been scrapped around the turn of the millennium, or destroyed in the warehouse during the civil war.

This Syrian Jagdpanzer IV took a catastrophic penetration through it’s glacis in 1967; during WWII this was considered the most-protected area of the vehicle.

By best estimate, Syria had twenty-five Panzer IVs fully operational on 6 June 1967, with maybe another ten or so partially operational or at least functional enough to take into combat. Most if not all of the ex-French batch was probably out of service by 1967, conversely the entire ex-Spanish lot was in use; along with some of the ex-Czechoslovak machines.

In addition to the pair already destroyed by Israel during the Water War, IDF tanks and aircraft destroyed (at a minimum) ten Panzer IVs during the Six Day War.

The last kill was on 10 June 1967 when a Panzer IV was destroyed by an Israeli M50 Sherman. This tank was a M4 Sherman hull fitted with a new American engine, and a modified turret housing Israeli electronics and a high-velocity French-made 75mm gun firing HEAT rounds. Like the Centurion, the M50 Sherman outclassed the Panzer IV.

Four more were captured intact and taken to Israel as trophies. As these relics obviously had zero intelligence value, they went straight to museum display. Two additional Panzer IVs were knocked out but stable enough to move and taken back to Israel, being used for evaluation of how Israeli ammunition had performed.

Syrian Panzer IV; this one was most likely from the ex-Spanish batch. A Syrian StuG III is behind it; both captured by Israel in 1967.

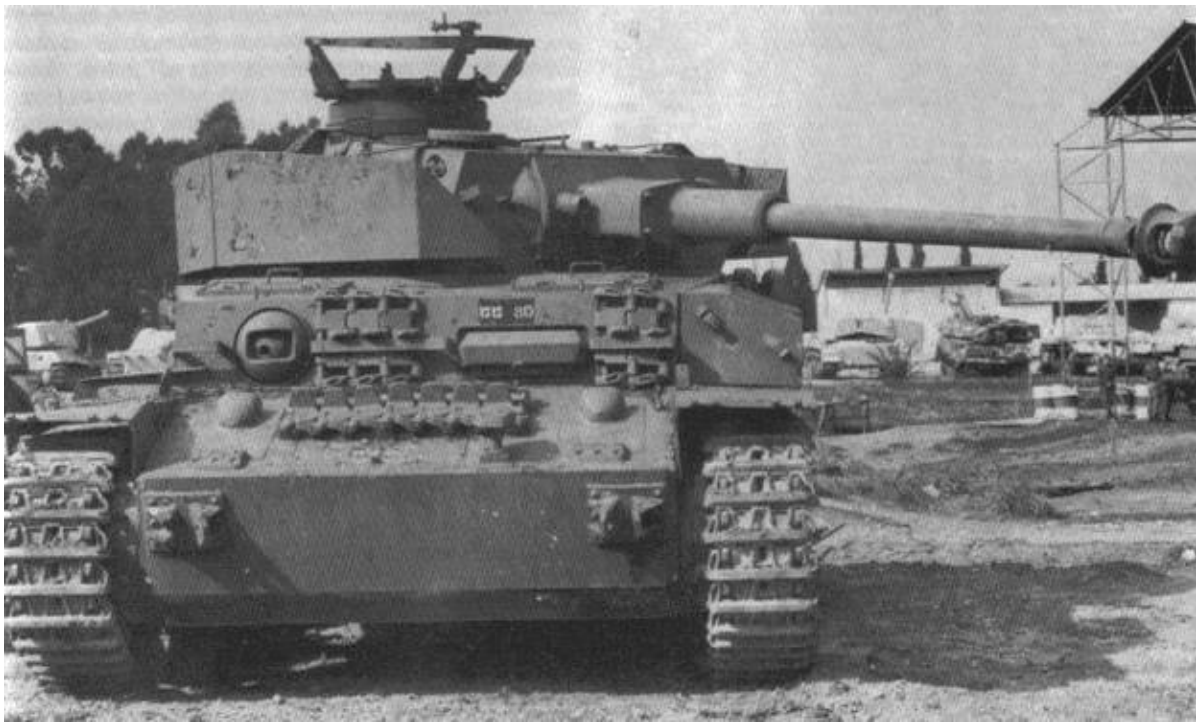
Syrian Panzer IV Ausf J destroyed in 1967. The Golan Heights were heavily land-mined and littered with UXO after the war, and the area itself is rugged terrain difficult to tow vehicles out of. Wrecks which the Israelis felt of low intelligence value were often just left to deteriorate.

Another destroyed Syrian Panzer IV. This is a "Frankenstein" with parts of the Ausf D, H, and J versions.

Israeli upgraded M50 Sherman tank and 4×4 recoilless rifle carrier; both grave threats to the unmodified WWII panzers.

This Syrian Panzer IV near Mt. Hermon was “racked” (suffered a penetrating hit resulting in it’s ammunition exploding) during the Six Day War.

A different Syrian Panzer IV, here an Ausf G, captured intact.



The same tank as above after it arrived at a collection point inside Israel. It has markings (in Hebrew letters) "mem mem 80" which doesn't fit into any known IDF serial scheme and may have been some sort of local inventory number.

The same tank as above, today in an Israeli museum. (photo by Janko Paliga)

The tank's placard at the Latrun museum.

A captured Panzer IV heads west towards Israel while IDF mechanized infantry advance deeper eastward into Syria. Another Panzer IV sits disabled on the road's shoulder.

Since Syria used (and lost) those in the best condition, the bulk of the remaining two dozen or so Panzer IVs would have been in a marginal material state. Some of the survivors of the carnage on 10 June had mechanical issues. In the end, it did not really matter much. After the conflict, it was clear that WWII panzers had no place on a modern Cold War battlefield. As far as is known, they did not destroy a single Israeli tank. While it is a credit to German industry that they were even running at all 22 years after WWII ended, clearly it was a mistake to try to use them against Cold War-era tanks.

Rusting wreck of a Syrian Panzer IV. This shows how the Schürzen panels had one-way hinges to allow use of the turret side scuttles.

Between 1964-1973 the USSR rebuilt the entire Syrian military from the ground up, reorganizing it along Warsaw Pact lines and equipping it with gear strictly of Soviet origin. There was no place for ex-Wehrmacht tanks and in any case, Czechoslovakia had ended spares & ammo support for the Panzer IV, so the type had no future. The surviving Panzer IVs were scrapped in Syria, except for one sold to a collector in Jordan.

The Six Day War was the final time WWII German panzers were used in combat anywhere in the world.

Like a ghost from the past, successive layers of post-WWII paint have corroded off this destroyed Syrian Panzer IV, showing a faint outline of the German balkenkreuz.

This article is from the https://wwiiafterwwii.wordpress.com/

Hopefully the Armor guys and History buffs will enjoy.

John Currie

“I Fear No Man”

The Royal Air Force’s Number 74 “Tiger” Squadron

The so-called “War to End All Wars” had been raging in Europe for three years when, on 1 July 1917, a unit of the Royal Flying Corps was formed at Northolt aerodrome as a Training Depot Squadron. Designated Number 74(TD) Squadron, they moved to London Colney aerodrome where they were equipped with Avro 504K training aircraft and re-designated as No. 74 (Training) Squadron. As the war raged on, it became apparent that they would eventually be sent off to fight. In March of 1918, they were sent to France, re-equipped with Royal Aircraft Factory SE.5a’s, and went hunting as No. 74 (Fighter) Squadron, Royal Flying Corps.

Their original flight leader was Edward “Mick” Mannock, who would eventually become the second-highest scoring RFC pilot of the war. He was a keen pilot, and he would score the squadron’s first enemy aircraft downed, an Albatros Scout, on 12 April 1918. Other squadron personnel included Ira “Taffy” Jones, Keith “Grid” Caldwell, Sydney “Timbertoes” Carlin, Frederick Luff, and several other RFC “Aces”. They were aggressive hunters—at the end of the war, the unit’s scoreboard tallied 224 enemy aircraft: 140 confirmed, 68 probable, and 15 balloons. Their aggressiveness during their seven months in combat inspired the squadron’s nickname—No. 74 Squadron would become known as the “Tiger Squadron”.

Photo 1: The first leader of the Tiger Squadron, Major Edward Corringham "Mick" Mannock VC, DSO & Two Bars, MC & Bar. (RAF)

Photo 2: A Royal Aircraft Factory SE.5a of No. 74 Squadron. Note the white rectangle on the fuselage used as the squadron marking at the time. (Via 74 Sqn Association)

Their wartime exploits couldn't stave off a standing down of the unit at RAF Lopcombe Corner near Hampshire in July 1919. It wouldn't be until September of 1935 and the Abyssinian Crisis that 74 Squadron would be reborn. This second incarnation of the Tiger Squadron was formed by combining a group of personnel from several different existing squadrons (3, 23, 32, 56, 65 and 601) who, on detachment, were aboard the troop ship *Neutralia* and headed to Malta. The squadron was equipped with Hawker Demons and called simply "Demon Flights", since the use of the 74 Squadron designation was not approved until 14 November 1935. Their assignment there was brief, and they returned to England in January 1936.

Photo 3: A Demon Flight Hawker Demon at Hal Far, Malta sporting the so-called "Malta Scheme". (Via 74 Sqn Association)

Photo 4: An overhead view showing the various camouflage scheme variations and the marking placement. (Via 74 Sqn Association)

Upon arriving at RAF Hornchurch, the Tigers received approval to use their “unofficial” badge —a snarling tiger’s face—and their motto: “I Fear No Man”. The Tigers would receive Gloster Gauntlets as part of the Royal Air Force’s new Fighter Command, and they would decorate the sides of the airplanes with alternating black and yellow “tiger stripe” flashes. They would remain at Hornchurch with their Glosters until February 1939, when they would trade their Gauntlets in for Supermarine Spitfire Mk.1a’s.

Photo 5: Gloster Gauntlet at RAF Hornchurch. (Via 74 Sqn Association)

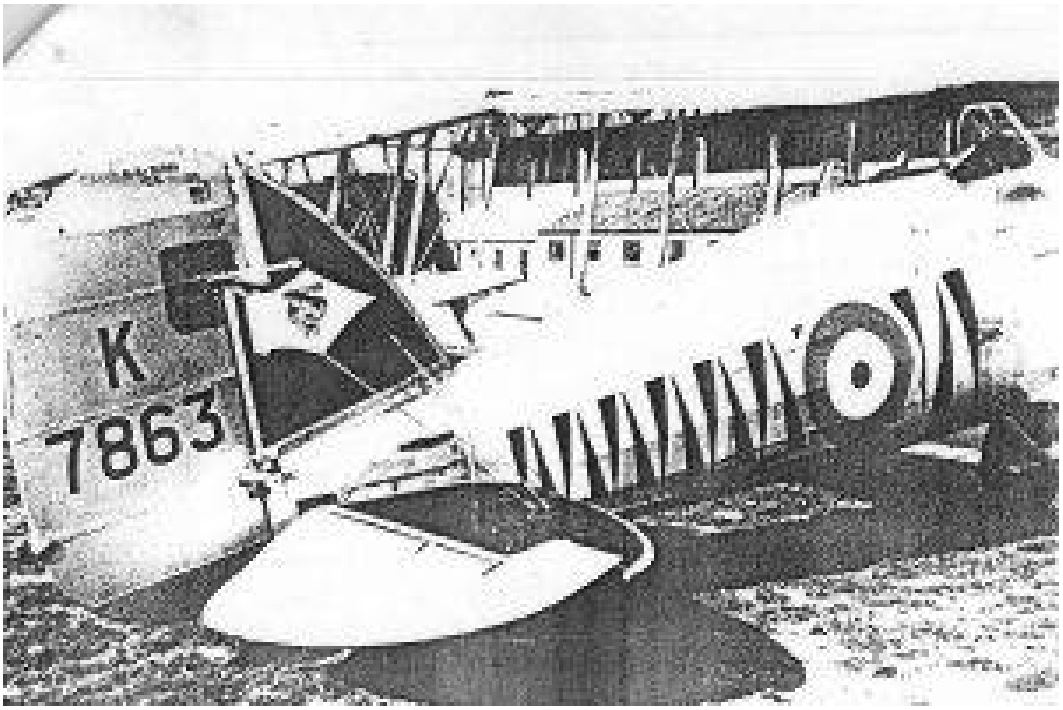


Photo 6: Note the "Tiger Stripe" flashes and the treatment of the tail surfaces on K7863. (Via 74 Sqn Association)

Photo 7: A minor mishap. Note the lack of the "tiger stripe" bar between the upper wing roundels. (Via 74 Sqn Association)

Photo 8: A rare camouflaged 74 Sqn Gauntlet. Note the use of the "JH" Squadron code, which would continue until late 1939. (Ian Simpson via 74 Sqn Association)

One of the more curious operations that 74 Squadron was involved with is called the "Battle of Barking Creek", a friendly fire incident that occurred in September 1939 when a group of Hurricanes with No. 56 Squadron left North Weald—four, followed by two. The later pair was mistakenly identified as hostile, and several units, including 74 Squadron, were scrambled from Hornchurch to intercept. 74 Squadron arrived on scene first, and Sailor Malan gave the order to engage and attack, and three aircraft peeled off to intercept. Flying Officer Vincent 'Paddy' Byrne and Pilot Officer John Freeborn opened fire on the "hostiles" about the same time as they were identified as friendly. One of the Hurricane pilots, Frank Rice, bailed out and was rescued; the other, Pilot Officer Montague Hulton-Harrop, was killed. He was the first casualty of the Battle of Britain, and it was the first Hurricane to be shot down by a Spitfire. The incident was investigated and ruled an accident, although there was some friction caused within 74 Squadron when Malan testified against Freeborn, who was determined to have fired the fatal shots on Hulton-Harrop's Hurricane, during the trials. Incidentally, one of the officers defending Freeborn at the trial was Squadron Leader Roger Bushell. He was later famous for leading the mass escape from Stalag Luft III in March 1944, better known as "The Great Escape".

Photo 9: A four-ship flight of "JH"-coded Spitfire Mk.Ia's takes off from RAF Hornchurch. (Tony Philpot from the Hornchurch

Aerodrome Historical Trust via 74 Sqn Association)

As part of 12 Group, the Tigers were active during the Dunkirk evacuation. Throughout the Battle of Britain, they showed their aggressive spirit under the leadership of Adolf Gysbert “Sailor” Malan. On 11 August 1940, the squadron downed 24 enemy aircraft and damaged a further 14. This prompted a telegraph from the Chief of the Air Staff, Sir Cyril Newall that read, "A magnificent day's fighting, 74. Mannock started it and you keep it up."

Photo 10: Group Captain Adolf Gysbert "Sailor" Malan, DSO & Bar, DFC & Bar, aboard a Spitfire in 1941. (RAF via 74 Sqn Association)

Three days later, the squadron was taken out of the battle, being sent to RAF Wittering, then RAF Kirton, and finally, to RAF Coltishall. While at Coltishall, they were re-equipped again, this time with Spitfire IIa’s. After their rest period, they were posted to RAF Biggin Hill in October. They closed out the year with 38 more enemy craft to their credit.

Photo 11: Then Pilot Officer (later Wing Commander) John Freeborn, DFC & Bar, on the wing of his Spitfire in 1940. (RAF via 74 Sqn Association)

*Photo 12: Spitfire IIb ZP*N, crashed in Calais in 1940. (RAF via 74 Sqn Association)*

After the New Year, the Squadron was moved around England, Wales, and Northern Ireland. While at RAF Long Kesh, the Governor of Trinidad presented the Squadron with Spitfires, and from that time until the late 1950's, the Squadron was also known as "Trinidad Squadron". It would be a year before the unit was back in action.

In April 1942, they squadron departed RAF Long Kesh. The personnel arrived in Egypt, but the ship carrying their aircraft sank, leaving them grounded. Briefly serving as a maintenance unit for U.S. Army Air Corps B-24 Liberators in Palestine, they eventually received Hawker Hurricane IIb's that December and were back in the fighter business. They participated in several campaigns in the Mediterranean Theater, being based in Crete, Iran, and Iraq at various times. They wouldn't be a Hurricane unit for long—in September 1943, they were once again given Spitfires in the form of the Spitfire Vb and Vc, and sent to Cyprus, where they remained until December. Returning to Egypt, the squadron received the new Spitfire Mx. IXc, and later upgraded to the Spitfire XVIe in March 1944.

Photo 13: 74 Squadron Spitfire IXe armed with rocket projectiles. (RAF via 74 Sqn Association)

Photo 14: Spitfire IXe in the Western Desert. Note the lack of a squadron code. (RAF via 74 Sqn Association)

They returned to RAF North Weald in April, where they became part of the RAF's 2nd Tactical Air Force during the invasion and European campaign. Using their Spitfires as ground attack aircraft, the Tigers proved they were every bit as good knocking out enemy ground targets as they were enemy aircraft. They would finish the war as a part of No. 145 Wing of 2TAF, being what we now call "forward deployed" to Belgium, the Netherlands, and Germany. They would return home in May 1945—big changes were ahead of the Tigers.

Photo 15: Spitfire LF.XVIe's of 74 Squadron in Holland. (RAF via 74 Sqn Association)

*Photo 16: Spitfire LF.XVIe "4D*V" of Squadron Leader A.J. "Tony" Reeves, DFC at Drope, Germany in 1945. (RAF via 74 Sqn Association)*

When they arrived home, they shuffled between several bases, finally landing at Horsham St. Faith. At the same time, they became the third RAF squadron to equip with jets when they began operating the Gloster Meteor Mk. 3 late in 1945. They would move from the Meteor F.3 to the Meteor F.4 in 1947, and finally to the F.8 in 1950. The Meteor F.8's once again featured the squadron's "Tiger Stripe" flashes, the first time since they gave up their Gauntlets.

Photo 17: A 74 Sqn Meteor F.3 at Colerne, Germany in 1945. (Via 74 Sqn Association)

Photo 18: An early Meteor F.3 at Colerne, 1945. Note the lack of fuselage codes at this point in time. (Via 74 Sqn Association)

Photo 19: A two-ship of Gloster Meteor F.4's takes flight. (Via 74 Sqn Association)

Photo 20: A four-ship formation of Gloster Meteor F.8's, still carrying the squadron's "4D" codes on the high speed silver paint finish. (RAF via 74 Sqn Association)

Photo 21: A nice study of the Meteor F.8 in tactical camouflage. Note the small squadron insignia and flashes on the engine nacelles in addition to the fuselage flashes. (Ian Cadwallader via 74 San Association)

In March of 1957, they moved on to second generation jets when they received Hawker Hunter F.4's, which were quickly replaced with Hunter F.6's later in the year. They would continue to fly the Hunter until mid-1959, when they became the first RAF Squadron to join the Mach 2 club when they received

their first English Electric Lightning F.1's.

Photo 22: A 74 Sqn Hawker Hunter F.4. Note the straight wing leading edge. (RAF via 74 Sqn Association)

Photo 23: A 74 Sqn Hunter F.4 is rearmed. Note the white vertical tail. (Imperial War Museum via 74 Sqn Association)

Photo 24: A Hunter F.6 on a rapid turn-around. Note the dogtooth on the wing leading edge. (RAF via 74 Sqn Association)

Photo 25: Fun with the squadron mascot. (RAF via 74 Sqn Association)

Relocating once again to RAF Coltishall at the same time as they received their Lightnings, 74 Squadron would do the painstaking work of ironing out the wrinkles of the new airplane as well as developing an aerobatic display team, “The Tigers”. The team would become the official display team for the RAF (taking the place of No. 92 Squadron “Blue Diamonds”) until 1963, when the honor would shift to No. 56(F) Squadron “Firebirds”.

Re-posted to RAF Leuchars in 1964, they also received the updated Lightning F.3. While no longer the official display team for the RAF, they were the RAF’s Tiger Squadron (actually, they were the *original* Tiger Squadron, of any air arm!), and would host the first NATO “Tiger Meets” while at Leuchars. Any NATO squadron with the tiger as their mascot could participate.

In 1966, the Tigers began upgrading to the Lightning F.6, bidding their last F.3 farewell in January 1967, when they also relocated to RAF Tengah Air Base in Singapore. They would remain there until 1971 when the Squadron once again disbanded. They flew their Lightning F.6 aircraft to RAF Akitori on Cyprus, where the aircraft would be transferred to No. 56(F) Squadron. The Tigers would remain in hibernation for 13 years.

Photo 26: A beautiful 74 Sqn English Electric Lightning F.1 at the Imperial War Museum. (Via 74 Sqn Association)

Photo 27: A Lightning F.1, before the traditional black tail was added. (RAF via 74 Sqn Association)

Photo 28: A Firestreak missile-armed Lightning F.3 banks away from the camera. (RAF via 74 Sqn Association)

Photo 29: The flightline at RAF Tengah, full of Tiger Squadron Lightning F.6's. Dig the overwing tanks! (RAF via 74 Sqn Association)

Photo 30: A camouflaged F.6, somewhat of a rare sight. These would soon be re-marked in No. 56 Sqn colors and the Tigers would stand down. (RAF via 74 Sqn Association)

In 1984, the squadron was once again stood up. The RAF had to send a squadron to the South Atlantic during the Falklands War, which depleted their domestic air defense and also their commitment to NATO in Europe. To remedy the situation, the Ministry of Defense bought 15 ex-U.S. Navy and U.S. Marine Corps McDonnell-Douglas F-4J Phantoms, had them refurbished, and assigned them to No. 74(F) Squadron at RAF Wattisham. Between 1985 and 1992, they were the only operator of the F-4J(UK), as the airplane was called. Initially wanting to keep the "American" Phantoms, they turned them in for second-hand Phantom FGR.2s that had been recently retired by No. 229 OCU (who had transitioned to Panavia Tornado F.3s). They would continue to be a Phantom operator until 1 October 1992, when they retired the last of the RAF's Phantoms.

Photo 31: An F-4J(UK) being test flown before delivery. Note the unusual color. (U.S. Navy)

Photo 32: A good photo showing the color differences between the NARF paint on "Juliet" (foreground) and proper RAF colors on "Oscar" (farthest from camera). (Colin Collis via 74 Sqn Association)

Photo 33: A nice in-flight shot of an FGR.2. (RAF via 74 Sqn Association)

Photo 34: End of the British Phantoms. Note the 56 Squadron red/white checked flash on the intake and "Firebird" insignia on the nose. (RAF via 74 Sqn Association)

Four days later, the unit was once again stood up, as No. 74(Reserve) Squadron, flying British Aerospace Hawk T.1A's out of RAF Valley with the 4th Flying Training School. They would even win the "Silver Tiger" trophy at the 1993 Tiger Meet. About that accomplishment,

Flt. Lt. Will Jonas later said, "Not bad for a training unit eh?!"

Photo 35: A Hawk T.1A in the early multi-colored scheme. Very pretty, but something's lacking. (RAF via 74 Sqn Association)

Photo 36: That's more like it. A proper 74 Squadron black-tailed Hawk T.1A gets its close-up. (RAF via 74 Sqn Association)

Photo 37: The end. 74 Squadron would paint several Hawks in a commemorative scheme before they disbanded. (RAF via 74 Sqn Association)

However, the end of the Cold War brought more moves to rationalize the RAF, and once again No. 74 Squadron was stood down and disbanded on 22 September 2000. There were whispers that the unit would become the first operator of the Eurofighter Typhoon, but these were merely that—whispers. So, the RAF's original Tiger Squadron exists in suspended animation—the role of Tiger Squadron in the RAF has been shifted to No. 230 Squadron at RAF Benson, flying Westland Puma HC.2 helicopters.

Kits to use

Some of the airplanes used by 74 Squadron aren't well represented in plastic—particularly the pre-WWI and between the wars equipment. With the exception of the SE.5a, they are all older kits; some are vac-form, resin, or limited edition/short run. The WWII and modern airplanes are quite well represented, at least in 1/72nd and 1/48th scales. Some might require conversion work, as indicated.

Avro 504K

1/72nd Scale: Airfix, AModel
1/48th Scale: Směr, Blue Max
1/32nd Scale: Roden (announced)

With the exception of the announced Roden kit, all of these kits are dated and will need some TLC to build. The other kits range in quality and accuracy, with the Airfix and Blue Max kits being the better selection in 1/72nd and 1/48th scale, respectively.

SE.5a

1/72nd Scale: ESCI* (later issued by Italeri)
1/48th Scale: Eduard (Royal Class or Kit # 82131), Roden (kit #416)
1/32nd Scale: Wingnut Wings*, Roden (kit 607)

*Requires modification from Hispano to Wolseley Viper-powered aircraft

Hawker Demon Mk. I

1/72nd Scale: Airfix, Matchbox, Frog, Aeroclub, AZ Models, Kora
1/48th Scale: Aeroclub, AZ Model, AMG^
1/32nd Scale: Silver Wings

^Requires modification from Hawker Hart

Gloster Gauntlet Mk. II

1/72nd Scale: Aeroclub Pegasus, VeeDay, AZ Models.
1/48th Scale: Aeroclub (both vac-formed and limited run injection molded)
1/32nd Scale: ICM

From here on out, it gets pretty easy.

Spitfire Mk.I and Mk.II

1/72nd Scale: Airfix (2010 tool)
1/48th Scale: Tamiya, Eduard
1/32nd Scale: Hasegawa/Revell

The Mk. II differs from the Mk. I by the addition of a small teardrop-shaped bulge on the starboard (right) side of cowling just behind the propeller spinner. The blister was needed to accommodate the Coffman Cartridge Starter on the Mk. II. It is easily added with a scrap of styrene. The prop was a Rotol unit with the blunter spinner—fortunately these propellers are available as spares in a few of the newer Airfix and Eduard Spitfire kits.

Hurricane Mk.IIb

1/72nd Scale: Airfix, Revell, Academy
1/48th Scale: Hasegawa, Airfix (2016 tool)*
1/32nd Scale: Revell, PCM, Fly Model

*Requires conversion from Mk. I. The Mk. II Hurricane had a nose that was 4” (actual) longer than the Mk. I. Hasegawa accommodated the difference in their various Hurricane kits.

Spitfire Mk. Vb and Mk. Vc

1/72nd Scale: Airfix
1/48th Scale: Tamiya, Airfix (New Tool)

1/32nd Scale: Hasegawa

The difference between the B type and the C type wings are in the wing armament. Look here for a guide to the various Spitfire wings.

Spitfire Mk. IXc and XVIe

1/72nd Scale: Eduard
1/48th Scale: Eduard, ICM
1/32nd Scale: Tamiya

The same note applies to the E-type wing. Follow the link above.

Gloster Meteor Mk. 3

1/72nd Scale: Cyber Hobby, Airfix
1/48th Scale: Tamiya
1/32 Scale: HK Models^

^Requires conversion from Meteor F.4

Gloster Meteor Mk. 4

1/72nd Scale: MPM, PJ Production, Revell, Special Hobby
1/48th Scale: Classic Airframes, Tamiya*
1/32nd Scale: HK Models

*Requires conversion from Meteor Mk.3. Alley Cat and Mirage Resins both have conversion kits for the Tamiya kit available. Whether the work to use the conversion kits is less than that required to build the Classic Airframes kit, I don't know. Pick your poison…

Gloster Meteor Mk. 8

1/72nd Scale: MPM, Airfix, PJ Production
1/48th Scale: Airfix, Classic Airframes
1/32nd Scale: I.D. Models, Tigger Models (same mold, vac-form)

Hawker Hunter F.4

1/72nd Scale: PJ Production, Revell*
1/48th Scale: Airfix, Aeroclub, Academy*
1/32nd Scale: Revell*

*Requires conversion from Hunter F.6. The main difference is the wing, tailcone, and exhaust—the tailcones and exhausts were larger on the F.6. The wing had an extended leading edge with a dogtooth, or snag, on the F.6. There is (or was) a conversion set from Wolfpack Design designed to be used with the 1/72nd scale Revell kit. Wolfpack did one for the Academy F.6 in 1/48th scale, although the new Airfix kit might be the better choice in that scale. In 1/32 scale, David J. Parkins and Blackbird Models both list conversion kits.

Hawker Hunter F.6

1/72nd Scale: Revell
1/48th Scale: Airfix (New Tool), Academy
1/32nd Scale: Revell

Academy's 1/48th scale Hunter is a basically good kit with one exception—the seat and cockpit are closer to 1/72 scale. A replacement is recommended—Aires makes a fine candidate.

English Electric Lightning F.1

1/72nd Scale: Airfix, Hasegawa, Trumpeter, Sword
1/48th Scale: Airfix
1/32nd Scale: Trumpeter

English Electric Lightning F.3

1/72nd Scale: Airfix, Sword, Trumpeter
1/48th Scale: Airfix
1/32nd Scale: Trumpeter

British Aircraft Corp Lightning F.6

1/72nd Scale: Airfix (new tool), Hasegawa, Trumpeter
1/48th Scale: Airfix
1/32nd Scale: Trumpeter

McDonnell Douglas F-4J(UK)^

1/72nd scale: Hasegawa, Fujimi, Academy, ESCI (Italeri), Monogram
1/48th Scale: Zoukei-Mura, Hasegawa, Academy, Monogram
1/32nd Scale: Tamiya

^All of these will require a minor conversion from a standard F-4J

McDonnell Douglas Phantom FGR.2 (F-4M)

1/72nd Scale: Airfix, Fujimi, Matchbox
1/48th Scale: Hasegawa
1/32nd Scale: Tamiya (Requires extensive conversion from F-4J)

British Aerospace Hawk T.1A

1/72nd Scale: Revell, Italeri, Airfix, Fujimi
1/48th Scale: Italeri, Airfix, HobbyBoss
1/32nd Scale: Revell

What about decals?

1/72nd Scale: Xtradecal's 74 Squadron History sheet X72106 covers the S.E. 5a; Gloster Gauntlet Mk. II; Spitfire Mk. I, Mk. II, Mk. Vb, Mk. IXe, and Mk. XVIe; the Hurricane Mk. IIB; Hawker Hunter F.4; and the F-4J (UK) and FGR. 2 Phantoms.

Xtradecal X72-057 has two Meteor F.8 options, one with the "4D" fuselage code, the other with the tiger stripe flashes.

In addition to the Hunter F.4 included in the anthology listed above, the Hawker Hunter F.6 markings are also available from Xtradecal sheet X72-046 and ADS sheet ADS 003-72.

Airfix supplies 74 Squadron decals in their new-tool Lightning F.6 kit number A05042.

Cutting Edge decals at one time offered a sheet (CED72077) covering the EE Lightnings flown by 74 Squadron (F.1A, F.3, and F.6). ESCI also had a sheet for the Lightning, but being ESCI decals, their worth is dubious at best. Model Alliance has a few sheets with 74 Sqn Lightnings, included, too—MA-72170 (F.3), MA-72182 (F.1/F.1A), and MA-72183 (T.4). Xtradecal sheet X72155 has options for the Lightning F.6, too, and X72097 covers the Lightning F.3. Modeldecal sheet 070 includes one Lightning T.4, too.

For the F-4J(UK), there are several choices: Modeldecal sheet #76, Microscale 72-469 and 72-486 (same subjects—the TIGER SQN aircraft—on different sheets, but 469 feature an incorrect typeface for the aircraft identification letters and the serials), Kits-World (172216), and Yellowhammer (YHD7201). The Xtradecal anthology sheet also has the Phantoms represented. Xtradecal sheet X72293 offers a standard FGR.2, and, finally, Syhart 72-114 does the "Mini Tiger Meet 1992" FGR.2

For the Hawk T.1A, ModelDecal sheet #116 includes a 74 Squadron airplane.

1/48th Scale: Xtradecal offers sheet X48080 which is similar to the smaller scale history sheet, although it does not cover as many subjects. Included are the S.E.5a, Spitfire I, Spitfire II, Spitfire Vc, Spitfire IXe, Spitfire XVIe, Lightning F.6, and F-4J(UK).

fündekals offers their "Spitfires Part 2: Early War" sheet which includes markings for "Sailor" Malan's Spitfire Mk. I as it appeared at two different points in time. Their instructions are downloadable, so even if you build in the other scales, you can at least use the information they provide to make your own set of markings.

Marmaduke Press sheet MPD48003 offers a Meteor F.8, as does Xtradecal X48-043—like X72-057, this sheet has both fuselage codes and squadron flashes, take your pick.

The Hawker Hunter F.6's are covered by Xtradecal X48-003, X48-189, and ADS sheet ADS 003-48. Caracal shows an upcoming sheet for the Airfix Hunter F.6, and one can hope it will

also include decals for the Hunter F.4 as well.

Model Alliance sheet MA-48182 has markings for the EE Lightning F.1/F.1A, while MA-48183 includes a Lightning T.4. Model Alliance sheet MA-48170 does the F.3. Flightpath did a sheet (#1/48) for the EE Lightning F.3.

For the Phantoms, Aeromaster's sheet 48-557 "Smokers Part 1" contains markings for an F-4J(UK)—they have some accuracy issues, but they are a start. Microscale's 48-243 also offers F-4J(UK) markings, but like their sheet 72-469, they have issues. Syhart decal sheet 48-114 is for the decorated "Mini Tiger Meet 1992" FGR.2. Yellowhammer sheet YHD48014 and Zoukei-Mura sheet SWS48-04-D01 are for the F-4J(UK) as well.

Mike Grant Decals sheet 48-021 and Model Alliance sheet MA-48105 cover the BAe Hawk, the latter with the large tiger's head on the tail.

1/32nd Scale: There isn't much on record for this scale. Xtradecal sheet X32009 offers markings for an EE Lightning F.1. The Phantoms are represented by Yellowhammer's sheet 32005 for the F-4J(UK). Xtradecal 32-039 provides markings for the Hawk T.1.

A few notes common to all scales: Since the markings for the Hunter F.4 and F.6 are similar, you can get from one to the other by changing the serials and identification letters with reasonably accurate results. The same can be done with the Phantoms, although it is easier going from the FGR.2 to the F-4J(UK) due to the additional squadron flash on the letterbox fin cap antenna on the Spey-powered airplanes. You can mask and paint it if you need to, as well.

When it comes to actual colors and markings and how they would have looked, I can't do any better than the IPMS Stockholm website's article by Rick Kent. My usual caveat on using someone's color plate drawing as a primary reference apply, but these will put you on the right track to where you need to go.

Some color notes. On the Meteor F.8 and the Hunters, the silver areas were not bare metal—they were painted a color known as "High Speed Silver", a semi-matte aluminum lacquer. The Lightings, on the other hand, were bare metal. It was with the Lightning that the airplanes of No. 74 Squadron received their now-traditional black tails.

The refurbished U.S. Navy and Marine Corps F-4J's received new paint when they went through the SLEP and refurbishment. The paint used was matched to U.S. equivalent colors, but for some reason the actual colors were far off the mark. The upper grey, especially, had a bluish cast to it, looked different depending on the ambient lighting conditions, and really stood out as "not quite right". Most of these airplanes would undergo deep maintenance during their years with the RAF, and some of them were repainted in "proper" British Standard colors.

74 Squadron used the following squadron codes during their history:

JH from February through September of 1939.
ZP from September 1939 through April 1942.
4D from April 1944 through April 1951.

TA-TZ on their Hawks from October 1992 until they disbanded in 2000.

References

My recommended go-to repository of all things related to 74 Squadron would be The 74 (F) Tiger Squadron Association website. There is a lot of information on the site, as well as downloadable newsletters and photo galleries. There is also a link to the blog chronicling the restoration of the last F-4J(UK) in existence by the Association and the British Phantom Aviation Group (BPAG). They are in the early phases, and they certainly have a lot of work to do, but I've been following it closely.

Most of the individual aircraft types have reference sources, too, but some of the early equipment (other than Mick Mannock's SE.5a) gets short shrift. 74 Squadron's equipment while they were in the desert during WWII is a bit difficult to find on a general level, primarily since they didn't carry squadron codes. Fortunately, things get better with the post-war equipment.

Many of these single type references are general in nature, and may or may not specifically contain anything related to 74 Squadron with one exception—there is an Aeroguide title, **Tiger Squadron Phantoms**, that covers the F-4J(UK). It is long out of print, but is an excellent reference for the type if you can find it.

So, there you have it. The Tiger Squadron may be in suspended animation again, but here's hoping that the RAF sees its way clear to reinstate it someday soon. Until then, we can look back on their service and get a glimpse of what it was like back then…

Ralph Nardone

German Navy Destroyers of World War 2

The major surface warships of the German navy during World War 2 were relatively few in number. Germany had been allowed to retain six pre-dreadnought battleships, six light cruisers, twelve destroyers and twelve torpedo boats under the terms of the Treaty of Versailles. Many of these vessels were scrapped to permit construction of the Deutschland class armored cruisers (pocket battleships) and early replacement light cruisers. The WW1 destroyers and torpedo boats were obsolete by WW2 standards. The Anglo-German Naval Agreement (AGNA) of 1935 permitted Germany to construct new naval units at up to 35% of the strength of the Royal Navy. The first new destroyers in the German navy had already been laid down in 1934, but none were operational when the AGNA was signed.

The German navy (Deutsche Kriegsmarine) of World War 2 never had a large surface fleet of modern vessels built after 1930. All told, there were two Bismarcks, two Scharnhorsts, three Deutschlands, three Hippers (heavy cruisers), and five light cruisers (of which the oldest was not used as a front line combatant). Not all of the above vessels were operational at the start of WW2. Supporting these ships were (ultimately) 40 new destroyers. Only 22 of these 40 were in service in September 1939. These 22 destroyers, Z1-Z22, had unique names, while the later war-time construction vessels were only given pennant numbers, Z23-Z39, and Z43 (Z is the first letter of *Zerstorer*, German for destroyer). The first four destroyers built were called the Type 1934, or Type 34, class:

These resembled many contemporary U.S. Navy destroyers in weapon layout. There were five subsequent classes of destroyers. The six classes, and some of their salient features, are summarized in the table below (length & beam in feet, displacements in tons).

Class	# ships	Main armament	Length, pp/wl	Beam	Displacement, std/full
Type 1934	4	5 x 12.7cm (5”)	374 / 381.2	37.0	2223 / 3156
Type 1934A	12	5 x 12.7cm (5”)	374 / 381.2	37.0	2171-2270/3110-3190
Type 1936	6	5 x 12.7cm (5”)	374 / 382.2	38.5	2411 / 3415
Type 1936A	8	4 x 15 cm (5.9”)	374 / 400	39.3	2596-3079/3519-3605
Type 1936A (Mob)	7	5 x 15 cm (5.9”)	374 / 400	39.3	2757 / 3691
Type 1936B (Mob)	3	5 x 12.7cm (5”)	374 / 398.6	39.3	2519 / 3542

Unfortunately for advocates of the KISS system (keep it simple stupid), ships have multiple measures for their lengths (perpendiculars (pp), waterline (wl), overall) and displacement (standard, full load,

etc.), and one needs to know which length is which before putting a ruler to your kit to see if it measures out to scale. In any case, all six classes were nearly identical in *size* to look at.

For comparison: the first post-World War 1 U.S. Navy destroyers, the *Farragut* class (c. 1934), were 330' long at the waterline, had a beam of 34'3", a standard displacement of 1358 tons (full load, 2307 tons), carried five 5" guns, and two quadruple 21" diameter torpedo tube banks. The *Farragut* class was significantly lighter in construction than German destroyers. This facilitated higher speeds, although the "fighting power" was comparable in terms of armament.

The German destroyer class names were often shortened by dropping the "19", i.e. Type 36 for Type 1936, etc. The German destroyers were all uniformly fast and large (roughly twice the displacement of many other navies' destroyers). The six classes were similar in having two stacks, one set of four torpedo tubes between the stacks and a second set of four behind the aft stack, and a transom stern (a squared off, rather than a rounded, stern). All had a top speed of 38 knots (in calm seas) which was a few knots slower than the contemporary USN *Farragut* class. The main armament was carried in single turrets, two forward and three aft (see Type 1934 drawing above), except for the 1936A class which had a single 5.9" forward, and the 1936A (Mob) class which had a twin 5.9" turret forward instead of two singles (see Type 36A and Type 36A (Mob) drawings below).

Some of the contrasting features of the German navy 5" and 5.9" gun are discussed later in this piece.

The next table gives the unique names and fates of the first 22 modern German navy destroyers. These were largely named for German war heroes.

	Type	Name	Commissioned	Fate
Z1	34	Leberecht Maas	1/14/37	Sunk 2/22/40, allied air attack
Z2	34	Georg Thiele	2/27/37	Scuttled at Narvik, 4/13/40
Z3	34	Max Schultz	4/6/37	Hit mine, 2/22/40, in North Sea
Z4	34	Richard Beitzen	5/13/37	Allocated to Britain after war
Z5	34A	Paul Jacobi	6/29/37	Allocated to UK, then go France
Z6	34A	Theodor Riedel	7/2/37	Taken over by France post-war

Z7	34A	Hermann Schoemann	9/9/37	Sunk 5/2/42 by RN ships
Z8	34A	Bruno Heinemann	1/9/38	1/25/42-sunk by mine
Z9	34A	Wolfgang Zenker	7/2/38	Scuttled at Narvik, 4/13/40
Z10	34A	Hans Lody	9/17/38	Allocated to Britain after war
Z11	34A	Bernd von Arnim	12/6/38	Scuttled at Narvik, 4/13/40
Z12	34A	Erich Giese	3/4/39	Sunk at Narvik, 4/13/40
Z13	34A	Erich Koellner	8/28/39	Sunk at Narvik, 4/13/40
Z14	34A	Friedrich Ihn	4/6/38	Allocated to USSR after war
Z15	34A	Erich Steinbrinch	5/31/38	Allocated to USSR after war
Z16	34A	Friedrich Eckoldt	7/28/39	Sunk 12/31/42 by RN ships
Z17	36	Diether von Roeder	8/29/38	Scuttled at Narvik, 4/13/40
Z18	36	Hans Lüdemann	10/8/38	Scuttled by RN boarders, Narvik, 4/13/40
Z19	36	Hermann Künne	1/12/39	Sunk at Narvik, 4/13/40
Z20	36	Karl Galster	3/21/39	Allocated to USSR after war
Z21	36	Wilhelm Heidtkamp	7/10/39	Sunk by RN torpedos, Narvik, 4/11/40
Z22	36	Anton Schmidt	9/24/39	Sunk by RN torpedos, Narvik, 4/10/40

These 22 named ships comprise the entire first three classes (1934, 1934A, and 1936). Skimming down the “Fate” column shows that the period 4/10-4/13/1940 was a bad one for the German navy. Ten of their 22 pre-war destroyers were lost at Narvik, Norway (more on this in the section on operations). The remaining 18 unnamed destroyers are summarized in the next table.

	Type	Commissioned	Fate
Z23	36A	9/15/40	Allocated to France
Z24	36A	10/26/40	Sunk by allied aircraft, 8/25/44
Z25	36A	11/30/40	Allocated to UK, then given to France
Z26	36A	1/11/41	Sunk in Barents Sea, March 1942
Z27	36A	2/26/41	Sunk by RN warships in Bay of Biscay,12/28/43
Z28	36A	8/20/40	Sunk by British aircraft, 3/6/45
Z29	36A	7/25/41	Allocated to UK, then turned over to USA
Z30	36A	11/15/41	Allocated to UK
Z31	36A (Mob)	4/11/42	Allocated to UK, then to France

Z32	36A (Mob)	9/15/42	Sunk off Normandy, 7/9/44
Z33	36A (Mob)	2/6/43	Allocated to USSR
Z34	36A (Mob)	6/5/43	Allocated to USA
Z35	36B (Mod)	9/22/43	Sunk by mines in Baltic, 12/12/44
Z36	36B (Mod)	2/9/44	Sunk by mines in Baltic, 12/12/44
Z37	36A (Mob)	7/16/42	Disarmed 8/44; scrapped 1949
Z38	36A (Mob)	3/20/43	Allocated to UK
Z39	36A (Mob)	8/21/43	Allocated to USA, then to France
Z43	36B (Mod)	3/20/44	Scuttled May 1945 after being damaged by mines

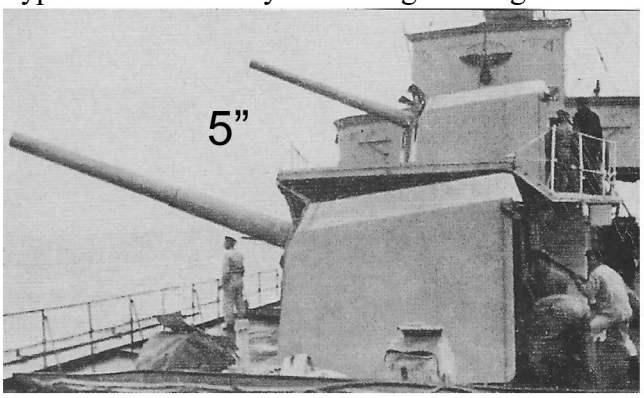
Z44 (Type 36B (Mod)) was actually launched, but it was sunk while fitting out prior to commissioning. Z45 (Type 36B (Mod)) was launched, but never completed. It was scuttled in 1946. In addition, the German Navy incorporated five *prize* destroyers into its fleet: the Dutch *Gerard Callenburgh* (ZH1), the French *L'Opiniatre* (ZF2), the Greek *Hermes* (ZG3), and two Norwegian craft, TA7 and TA8, which became ZN4 and ZN5.

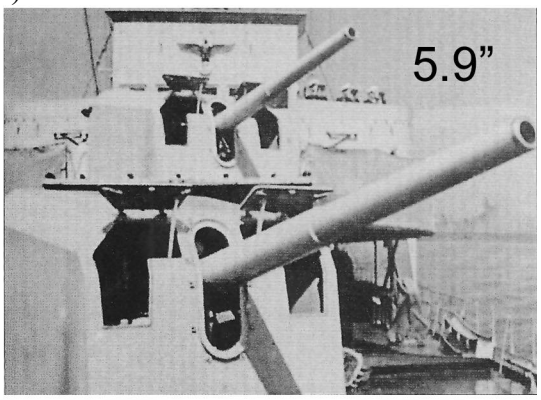
The German Navy had a 5" gun like many other navies! It was used on the first 22 destroyers. It was not a dual purpose weapon, however, like the USN 5" gun (max. elevation was 30°). The German 5" gun was never used on their battleships and cruisers, which carried 5.9" and/or 4.1" guns. The 5.9" gun was also the main armament of the German light cruisers. It was essentially their version of the 6" gun found in the USN and RN on many light cruisers. Putting 5.9" guns on German destroyers was a controversial design change made with the idea of getting light cruiser firepower on a destroyer hull. I have read that the German designers thought they could maintain the rate of fire of the 5" single mount in their 5.9" single mount. The primary disadvantage, however, was the increased weight of the 5.9" guns versus the 5". They were also found to have a significantly slower rate of fire in practice. They did, however, have a range advantage of about three miles compared to the 5".

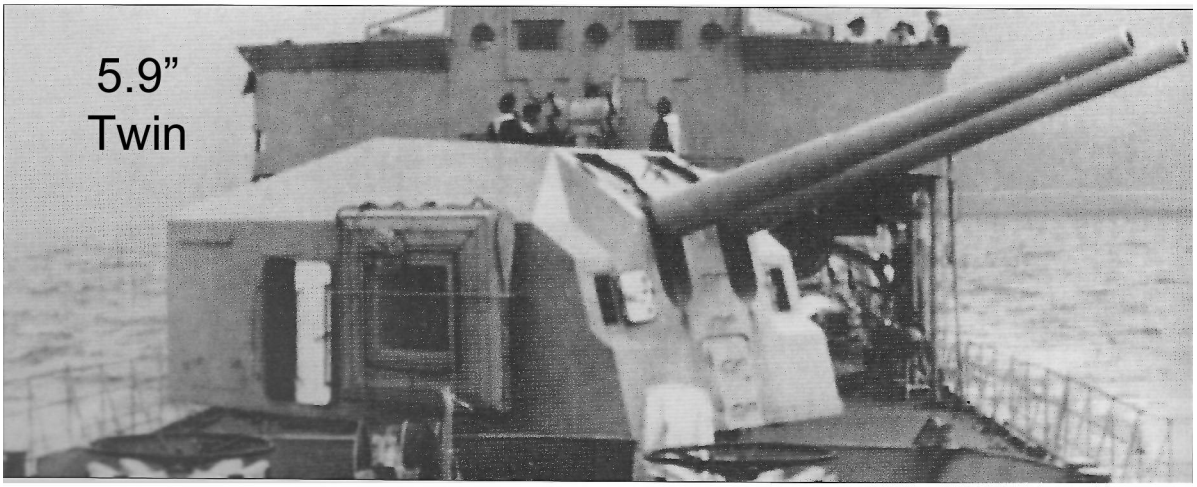
	Mounting weight	Horizontal range	Rate of fire (rpm)	Shell Weight
5"/45 C/34	11.2 ton	19,000 yds	15-18	61.7 lbs
5.9"/48 C/36 single	17.7 ton	24,000 yds	7-8	99.2 lbs
5.9"/48 C/36 double	**66.6** ton	24,000 yds	7-8	99.2 lbs

So, a full change over from five single 5" mounts to five single 5.9" mounts led to a 32 ton increase in displacement. Rolling two single 5.9" mounts into a double mount led to a further 31 ton increase in displacement (this turret was more heavily armored than the other two). The Type 36A (Mob) vessels with the twin 5.9" turret in the front were found to ride low in the bow in a design that already had seaworthiness issues (all the German destroyers tended to drive into waves with the bow rather than riding up the waves – this kept the forward guns from being used in heavy seas). Given the higher actual rate of fire of the 5" guns, the 5" guns were able to deliver a larger total mass of shell per unit time than a similar number of 5.9" guns, though perhaps they could not achieve the same penetrating power against warship armor. The three photographs show the forward gun mount types (except for

Type 36A which only had a single 5.9” gun forward).







Single 5.9” turrets were also used on the Deutschland and Scharnhorst class ships, while the twin 5.9” turrets were used on the Scharnhorst and Bismarck class ships. The 5.9” was the primary secondary caliber weapon on those classes (after the 11” or 15” primary). Note that the destroyer 5” turrets were not enclosed on the back side making them problematic in high seas. The “windows” on the front faces of the turrets are “vision flaps” that allowed the gun crew to manually spot the fall of shot. The big square object on the side of the twin 5.9” turret is a life raft. The large cast bronze eagles on the front of the bridge in the top two single turret photos were a pre-war feature.

German destroyers also carried a secondary armament. This armament typically comprised four to six twin 3.7 cm turrets. (Some were outfitted with single 3.7 cm guns if twins weren’t available.) The destroyers also carried a varying number of 2 cm (20 mm) guns in both single and quadruple (*vierling*) mounts. The *vierling* (English: quadruplet) mounts were developed late in the war and were first mounted on the three Type 36B (Mob) class destroyers. The five earlier classes carried from 5-8 of the 2 cm guns in single mounts.

There were the inevitable exceptions to the nominal armament described above. Z5, Z10, and Z15 (Type 34A) had their third 5” gun removed and replaced with a flak unit. During 1942-3 Z23, Z24, Z25, and Z29 (Type 36A) had their lone forward 5.9” single-barreled turret removed and a twin 5.9” twin-barreled turret fitted as in the Type 36A (Mob) class. Z31 of the Type 36A (Mob) class was originally fitted with a single 5.9” turret, which was subsequently replaced with a twin, but that was later removed and replaced with a single 10.5 cm (4.1”) turret.

WARTIME OPERATIONS

All but three of the operational destroyers started WW2 in the Baltic, where they prevented Polish warships and merchant ships from escaping during the Nazi ground invasion. Subsequently, the destroyers were engaged in defensive mine laying operations in the North Sea. There were some minor skirmishes with RN vessels, and two German light cruisers operating in a distant support role to the destroyers were torpedoed by British submarines. The Germans later lost two destroyers, Z1 and Z3, during a British air attack: Z1 by bombs, and Z3 from either bombs and/or "friendly" mines.

April 1940 was the time set for *Operation Weserübung*, the German invasion of Norway. This invasion was a radical departure from the behavior of the German High Seas Fleet in World War 1 during which it had confined its operations to the North Sea. The WW2 German Navy did not yet have Bismarck or Tirpitz in operation, and what forces it did have were vastly outnumbered by the ships of the Royal Navy. (Those forces were essentially two Scharnhorsts, two Deutschlands (*Graf Spee* was sunk), two heavy cruisers (*Prinz Eugen* was not yet commissioned), four light cruisers (two were undergoing repairs after being torpedoes by British submarines) and 16 destroyers. This entire available force was committed to the Norway invasion.) Four destroyers supported the invasion of Trondheim (with heavy cruiser *Admiral Hipper*). Ten destroyers were used to ferry mountain troops to the far northern Norwegian port of Narvik. These were supported by three fleet oilers, one of which was sunk and another captured by boarding. The lone oiler that reached Narvik was a converted whaler with insufficient pumping capacity to fully refuel the entire destroyer force in a timely manner.

A force of British destroyers entered the fjord of Narvik on April 10. Z21 and Z22 were torpedoed and sunk, Z19 was severely damaged by the explosion that sank Z22, Z18 had her steering gear damaged by shellfire, and Z17 received the brunt of British gunfire and had to be abandoned. The remaining German destroyers, now alerted to the British presence, counterattacked sinking *HMS Hardy* and *HMS Hunter* and severely damaging *HMS Hotspur.* Z2 was severely damaged on the German side in this second round. Of the eight German destroyers remaining afloat, only four were fit for battle.

Z2, Georg Thiele, a Type 34 destroyer.

The British returned in force on April 12, 1940 with nine destroyers and the battleship *HMS Warspite*. Z13 was spotted attempting to ambush the British force and was shot to pieces, then scuttled. A surface action between the two destroyer forces followed during which the German destroyers used up most of their remaining ammunition. Z19, already damaged on 4/10, was scuttled when her ammunition was gone. Z12 attempted to flee Narvik and was sunk by *Warspite*. Z17, already heavily damaged on 4/10, was finished off. Z2 torpedoed *HMS Eskimo*, and then was run aground when she ran out of ammunition. Z9, Z11, and Z18 were abandoned and scuttled once their ammunition was gone, but the scuttling charges on Z18 failed to explode. Z18 was eventually sunk by *HMS Hero*. By the end of 1940 the German Navy was down to just ten destroyers. These were mainly used to attack coastal merchant shipping until other needs arose.

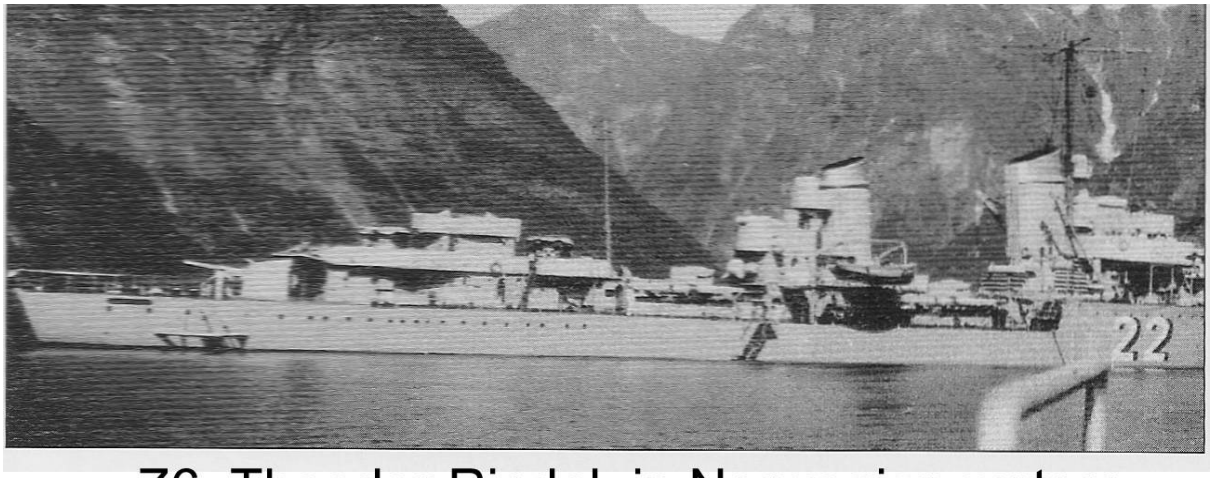
The next major operation supported by German destroyers was *Operation Cerberus*, the "channel dash" in February 1942. Battleships *Scharnhorst* and *Gneisenau* along with heavy cruiser *Prinz Eugen* were effectively trapped in the port of Brest, France following operations in the North Atlantic. The decision was made to attempt to return these ships to German ports by the most direct route: north through the English Channel, up the coast of the Netherlands, and east to Germany. No German destroyers were in France, but Z4, Z5, Z7, and Z8 were dispatched from Kiel, Germany. One was lost to a mine, but the other three reached Le Harve, France on Janury 25, 1942. These were subsequently joined by Z14 and the two new destroyers, Z25 and Z29. The six destroyers sortied on the night of February 11 to lead the three German capital ships home, supported by numerous smaller warships. All six destroyers survived the operation, although three older torpedo boats were sunk.

In March 1942 Z24, Z25, and Z26, operating out of Kirkenes, Norway, attempted to intercept convoy PQ13. They encountered the British cruiser *HMS Trinidad* and some destroyers which damaged Z25 and Z26 with gunfire. Z26 was pursued by *Trinidad*, who attempted to torpedo Z26. Out of three torpedoes targeted, two failed to launch and the third circled and hit *Trinidad* in the bow. The engagement stalled, and Z24 and Z25 were able to remove the crew of Z26 which had to be abandoned and scuttled. There were several other attempted attacks on convoys making the run to and from Murmansk that resulted in damage to German destroyers and the loss of Z7.

In July 1942 destroyers were deployed in a combined operation against convoy PQ17. Germany assigned the *Tirpitz*, *Lützow*, *Admiral Scheer*, and *Admiral Hipper* as the main force with the destroyers acting as scouts and escorts. *Lützow*, along with Z6, Z10, and Z20, all ran aground before reaching open sea. Only Z14 was able to participate after this dismal exhibition of German seamanship.

Z20, Karl Galster, a Type 36 destroyer.

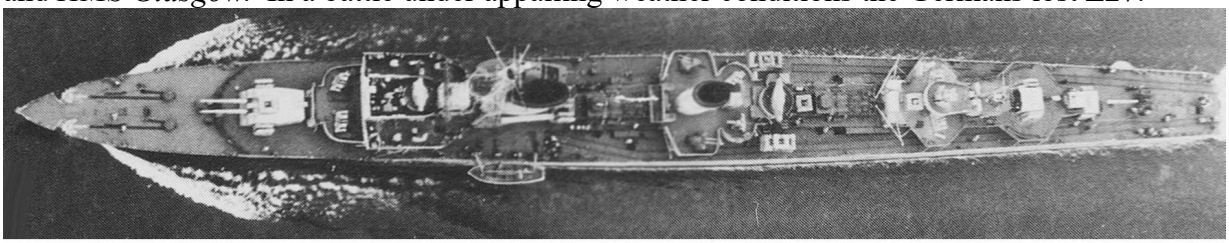
At the very end of 1942 *Lützow* and *Admiral Hipper* were sent to intercept convoy JW51B. They were escorted by six destroyers, Z4, Z6, Z16, Z29, Z30, and Z31. *Lützow* and *Admiral Hipper* separated with three destroyers accompanying each. The convoy was found in the evening and action commenced. Two British light cruisers engaged *Hipper* and her three destroyers, who thought they were being fired on by *Hipper*. In this action Z16 was sunk with the loss of her entire crew. The remaining German forces retreated, and Hitler was furious that a superior German force and turned and ran from a significantly weaker British force. Z6 was one of the German destroyers operating in Norwegian waters. The photo below shows her there. The "22" on the side of her hull does not designate this ship as Z22, but rather that this ship is the second unit of the second destroyer flotilla.



Z6, Theodor Riedel, in Norwegian waters.

In December 1943 Z29, Z30, Z33, Z34, and Z38 were operating with *Scharnhorst* and were detached to search for enemy merchant shipping. While they were detached, *Scharnhorst* was engaged and sunk by the battleship *HMS Duke of York* and supporting British naval forces. The German destroyers failed to detect the British forces and gave no warning to *Scharnhorst*.

Also in December, 1943 a force of Z24, Z27, Z32, and Z37 was sent to escort a German blockade runner through the Bay of Biscay. This ship had already been sunk without the German's knowledge, and their force was intercepted by a British force including the cruisers *HMS Enterprise* and *HMS Glasgow.* In a battle under appalling weather conditions the Germans lost Z27.



Type 36A (Mob) class Z39, sister to Z32 and Z37.

1944 was a lean year. Following D-Day and the invasion of Normandy, Germany began to lose her naval bases in France and Belgium, and had to pull her ships back to German waters. Another catastrophe struck the German destroyer force in December 1944. Destroyers and torpedo boats went to lay mines off the coast of Estonia (in the Baltic Sea). Both Z35 and Z36 were lost to mine-related damage. 1945 saw many of the surviving German naval units engaged in shore bombardment missions in the Baltic in the losing battle to stop the Soviet army advance on Berlin.

INJECTION MOLDED KITS

The situation with plastic kits of World War 2 German destroyers has never been great in terms of the number of offerings or breadth of coverage of the six classes. Major on-line ship kit vendors often only have a couple of choices for kits, even if they continue to sell detail up sets for older kits that they no longer offer. Shown below in a group photo are eight kits that you can probably find right now at one of the on-line hobby stores (there are a few others out there on eBay from not so long ago).

Kits are typically either 1/700 or 1/350. There is an Airfix "Narvik" multi-subject kit with a 1944 Z28 destroyer in it at 1/600 scale (but Z28 was not involved in the Narvik battles of 1940 or even commissioned). I have a Trumpeter 1/700 Z7 in my stash which is hard to find in stores. Trumpeter

has also issued Z21, Z25, Z28, Z30,and Z43 kits. The lone “big four” kit from Tamiya (the Z39-39 kit) is dated, but does have parts to build two complete waterline destroyers.

All these kits are reviewed in Robert Brown’s Shipcraft series book on German Destroyers (Seaforth Publishing 2019).

David Koopman

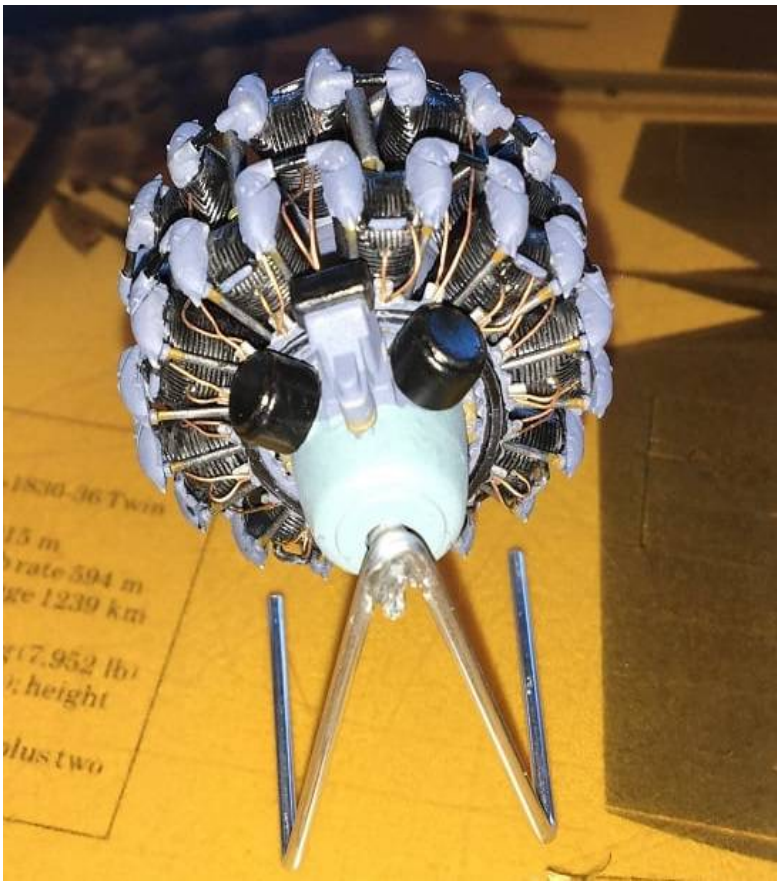
Members Builds and Works in Progress during Self Isolation

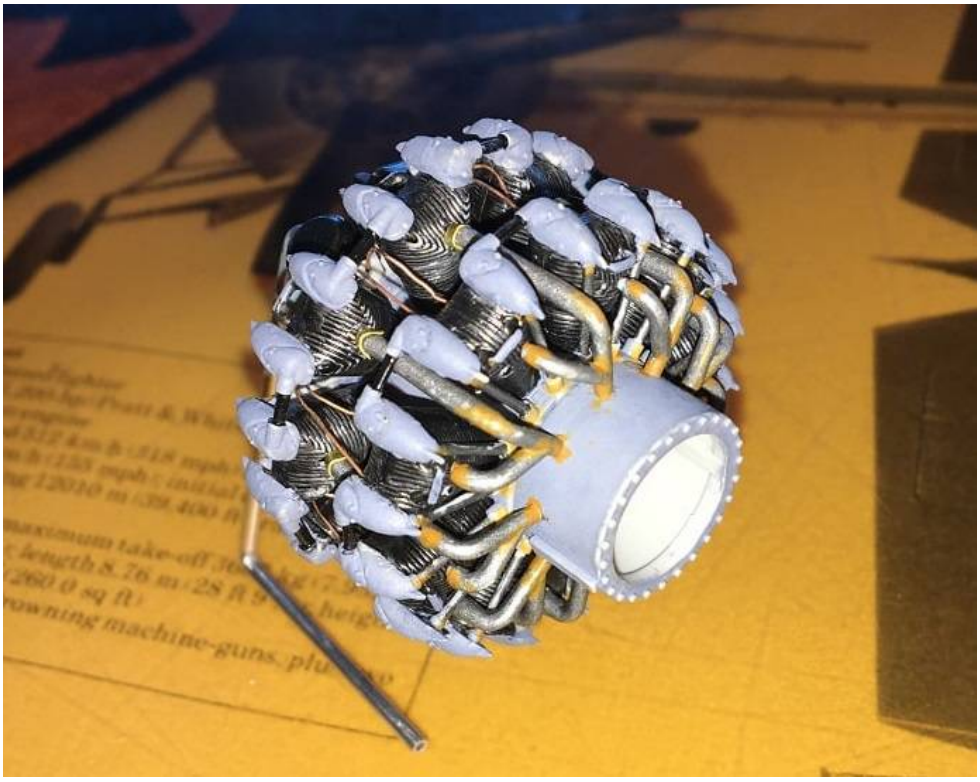
Jodie Peeler – Salvinos J R Models – 1/24 scale Pontiac 2+2.

Jodie Peeler – Pegasus – 1/48 scale Hurricane Mk.I.

Norm Foote – Lindberg – 1/762 scale DKM Scharnhorst.

Tom Wingate – Revell – 1/25 scale Porsche 914-6.





Tom Wingate – Trumpeter – 1/32 scale F6F Hellcat (WIP).

Norm Foote – AMT – 1/25 scale 1950 Chevrolet 3100 Pickup, Carrie used to drive one on the ranch in Artesia, New Mexico (WIP).

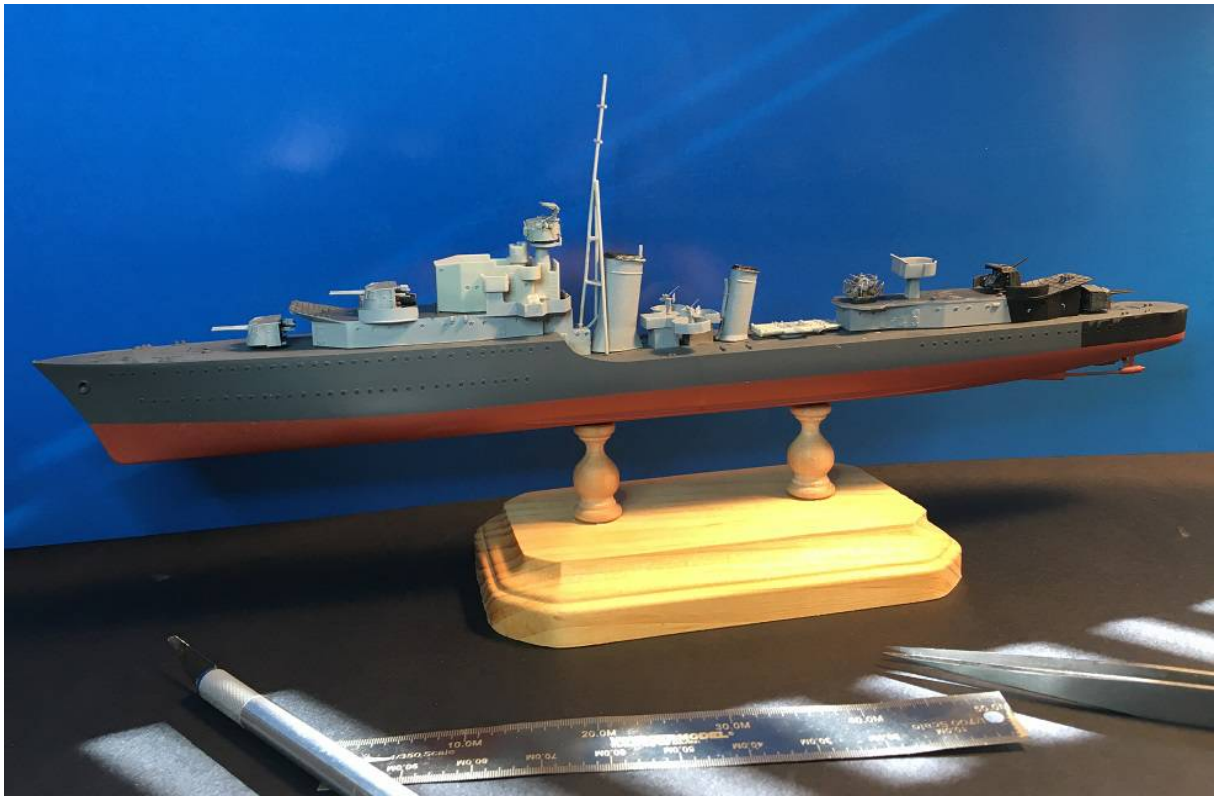
John Melton – Tamiya – 1/48 scale Ki-84 Hayate.

John Melton – Accurate Miniatures – 1/48 scale Mk.IA Mustang.

John Melton – 1/48 scale Brewster Buffalo.

John Melton – Tamiya – 1/35 scale SdKfz 251/1.

John Melton – Dragon – 1/35 scale British Firefly.



John Currie – Trumpeter – 1/350 HMS Sikh from the Zulu kit with many parts replaced with 3D printed items from Micro Master (WIP).

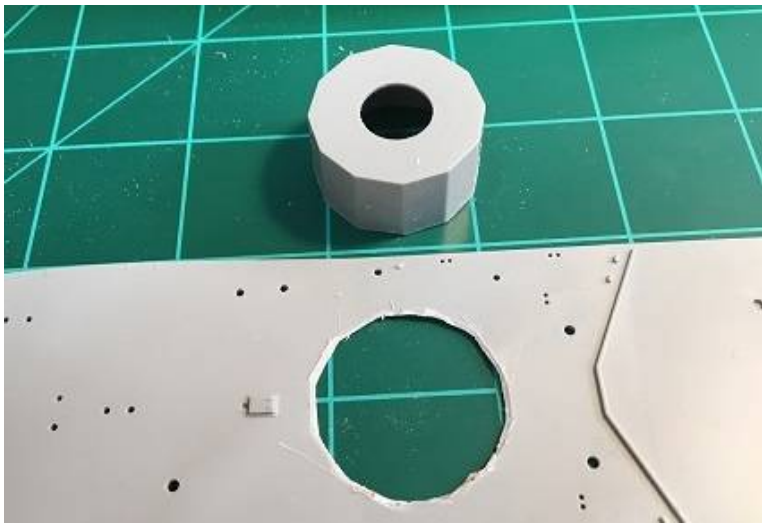

ZE360

Ralph Nardone – Academy – 1/72 scale F-4J(UK) with Superscale decals (WIP).

John Currie – Trumpeter – 1/350 scale HMS Roberts with Micro Master 3D printed parts (WIP).

I decided that i would build HMS Abercrombie alongside her sister and Name ship of the class HMS Roberts, Trumpeter actually released the Abercrombie kit first, There are many differences between both to make it worthwhile building both, However i think Trumpeter used the Profile Morskie Publication for their research as it seems all the mistakes in the publication followed to the kit,

The biggest and standout error is the Barbette for the 15” gun, Roberts had a 12 faceted Barbette and Abercrombie a round Barbette. I hunted high and low for 1.1/8” Tube and Rod to make a new barbette, no joy, i contacted Mike Roof and asked if he could design a barbette for me to send in to Shapeways and have it 3D printed, to cut the story short, Mike designed and printed off exactly what i needed including a spare, Thanks Mike, Much Appreciated.

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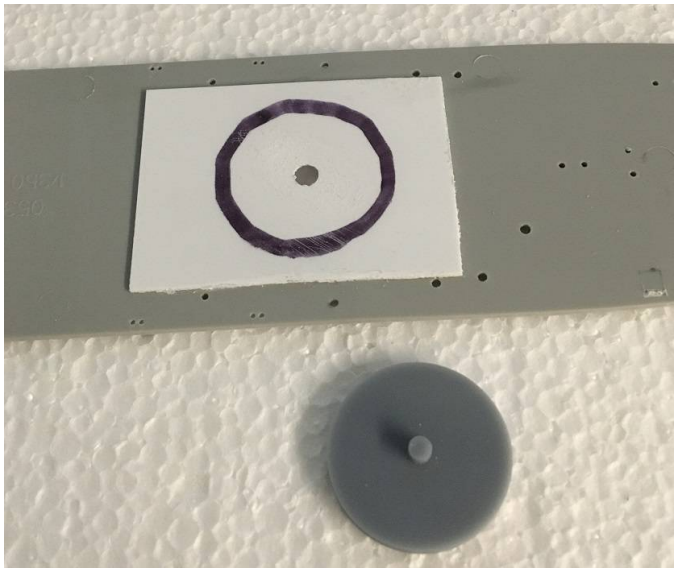
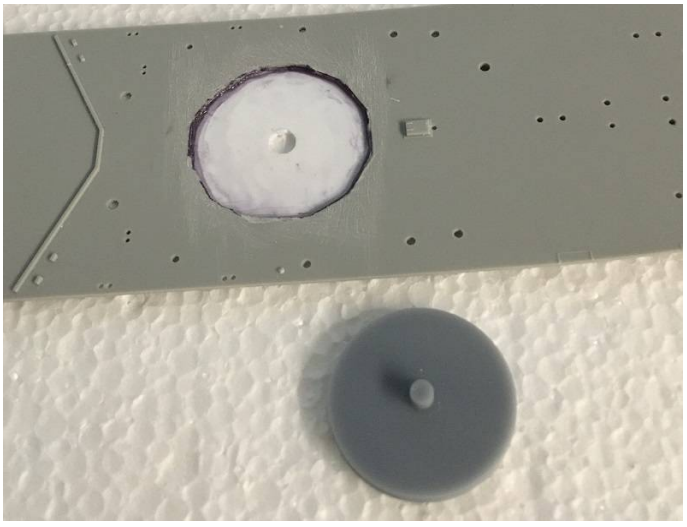
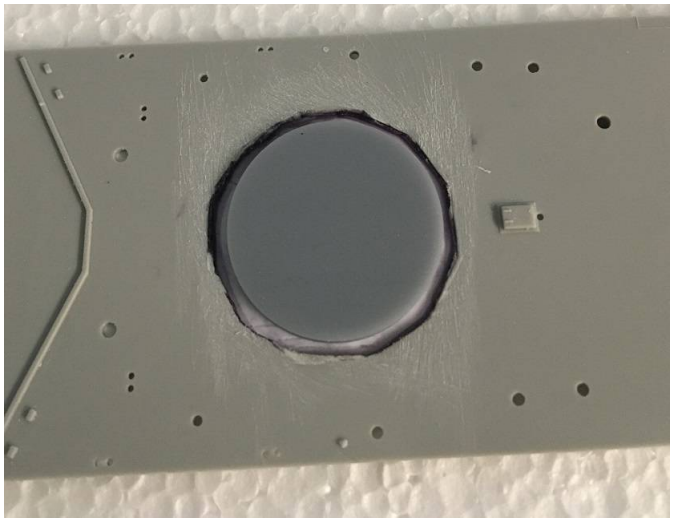
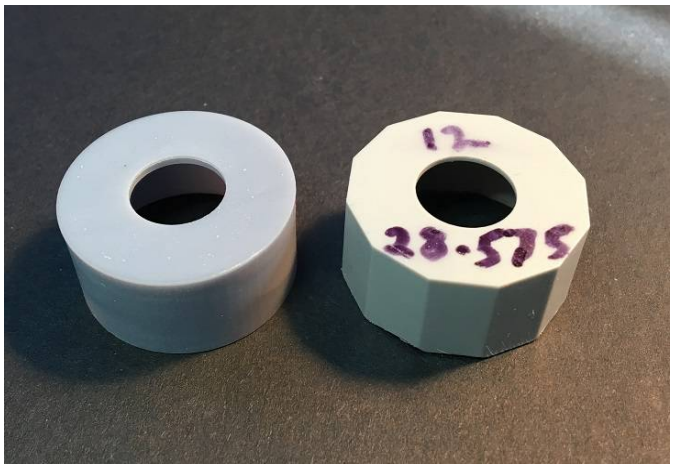
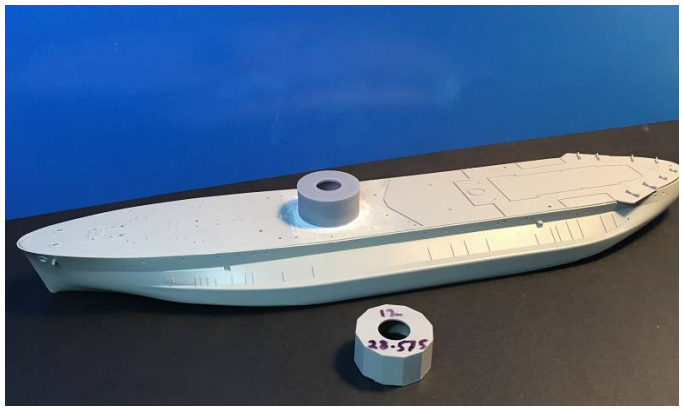


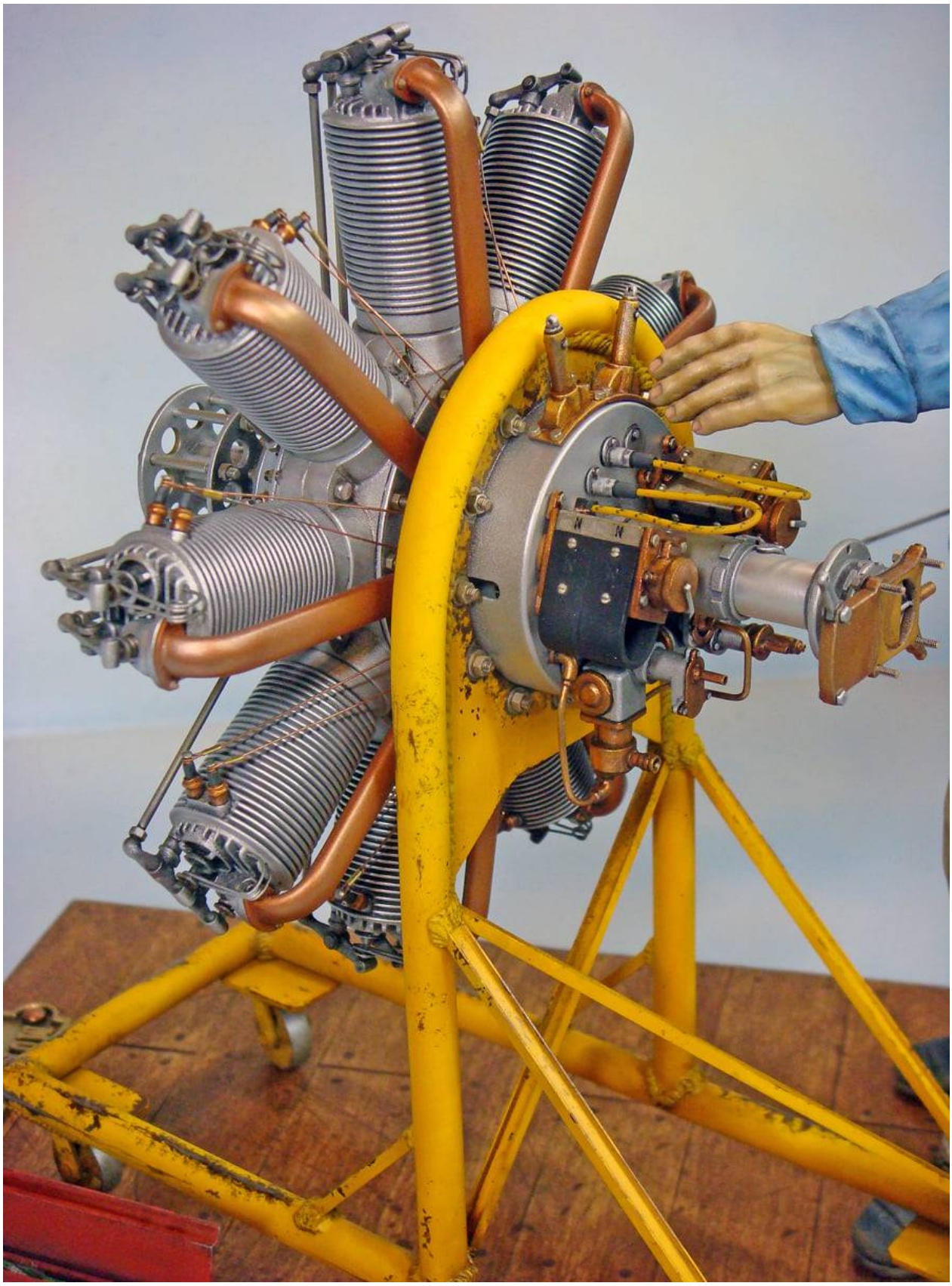








John Currie – Trumpeter – 1/350 scale HMS Abercrombie with 3D printed Barbette by Mike Roof.



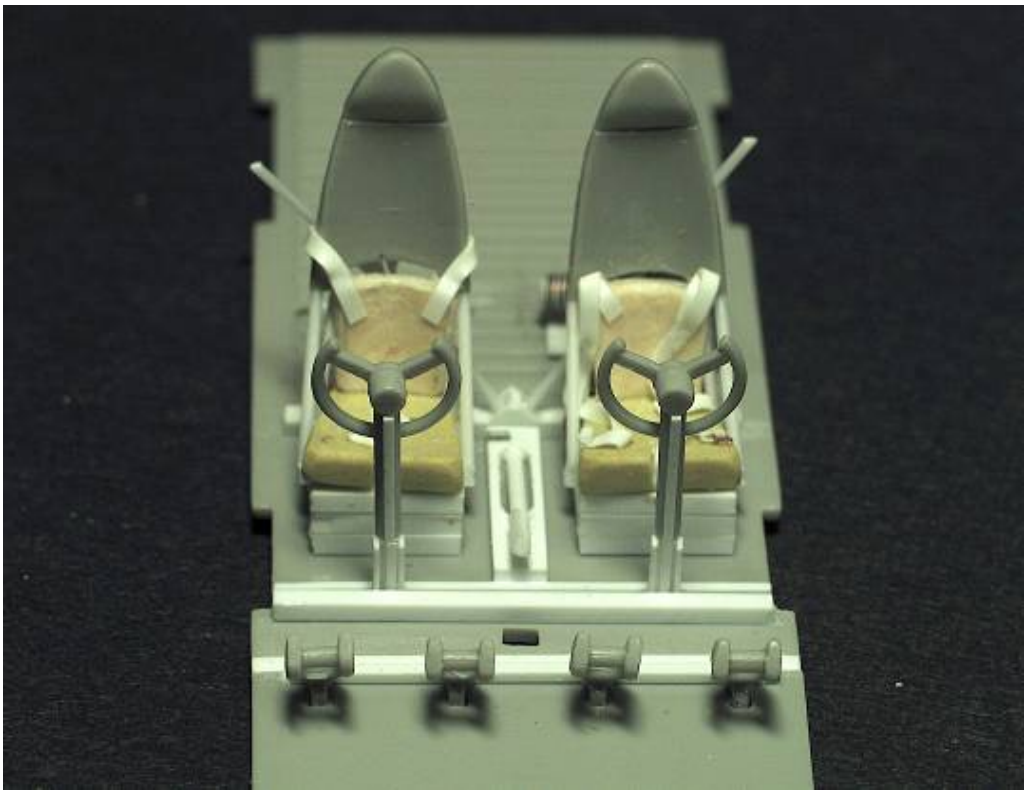
Mike Roof – Hasegawa – 1/8 scale Much modified Clerget 9b rotary engine with 3D printed figure.

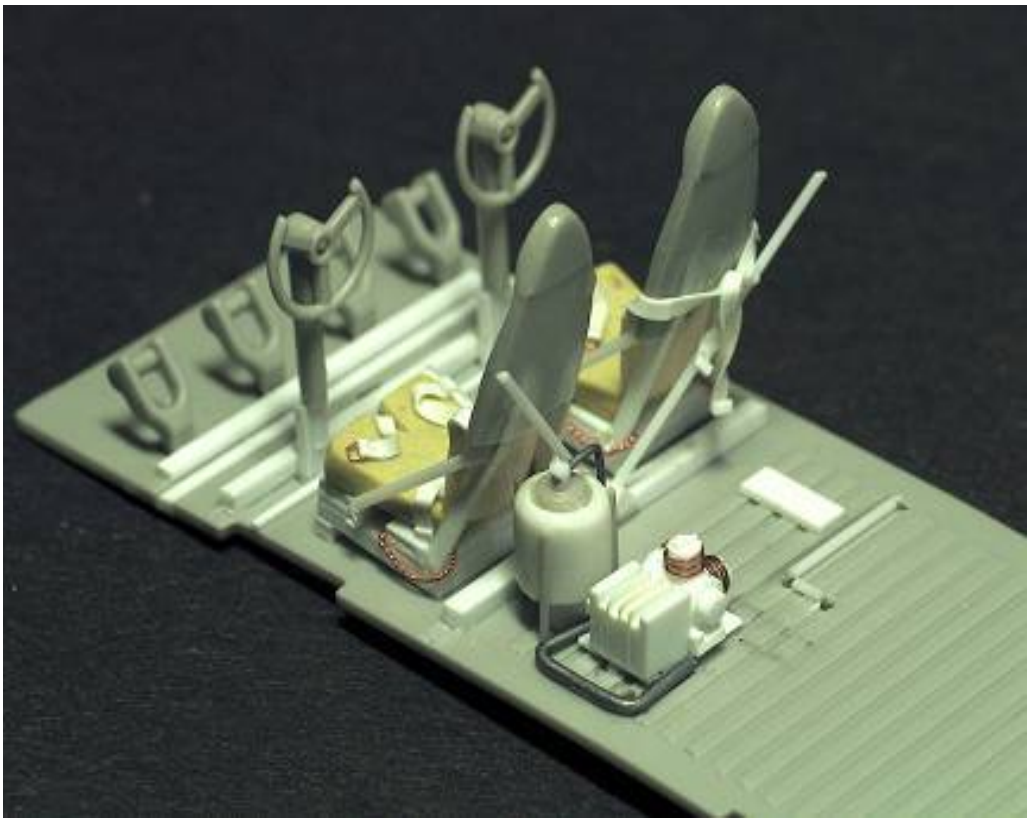
Hub Plott – Hasegawa – 1/48 scale Bf-109T, Kit supplied conversion parts (WIP).

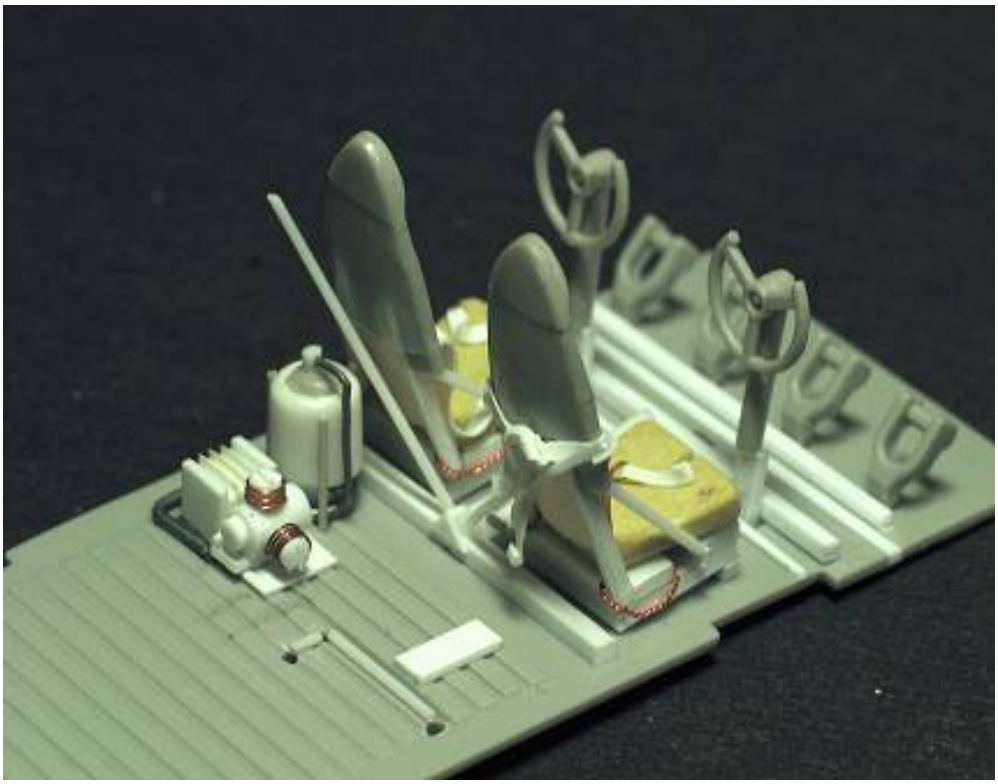
How i do it by Lucio Martino

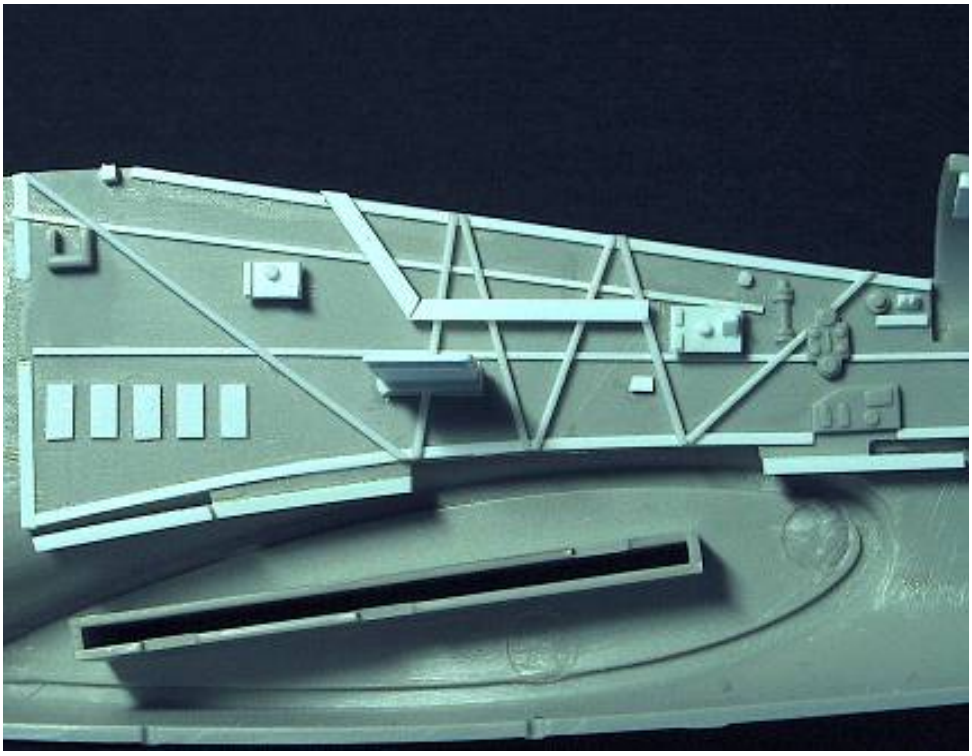
I started loving this hobby forty years ago, during the golden age of Airfix. As a result, even if we have now an incredible choice of etched, resin, and 3D printed accessories, scratch building is my favorite detailing solution. Here are two examples about detailing a cockpit taking only advantage of some Milliput putty, Tamiya flexible tape, and Evergreen stripes. These are two very different kits. One is the Academy 1:72 Tempest. The other is the Trumpeter 1:48 Sparviero. they have in common a quite empty cockpit that, at the end, will not be very visible. In my opinion, there is really no use in going for the ultimate detail in 1:48, not to mention in 1:72. Simulating small details, rather than reproducing them, is in these cases my way to go.

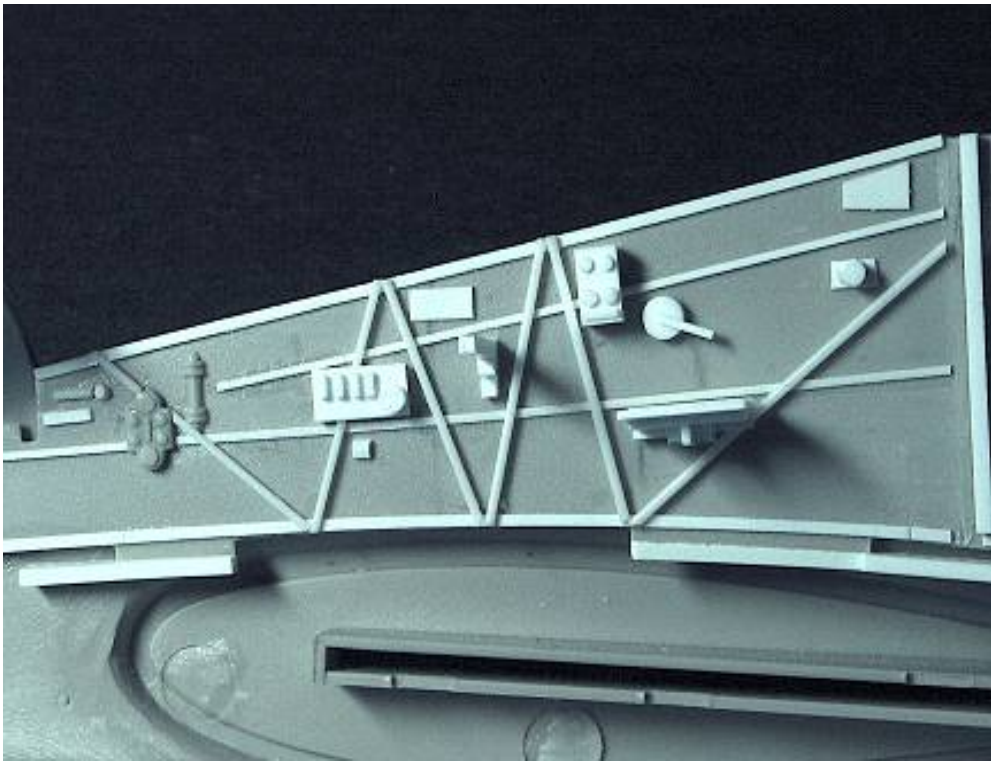
1/48 Trumpeter Sparviero

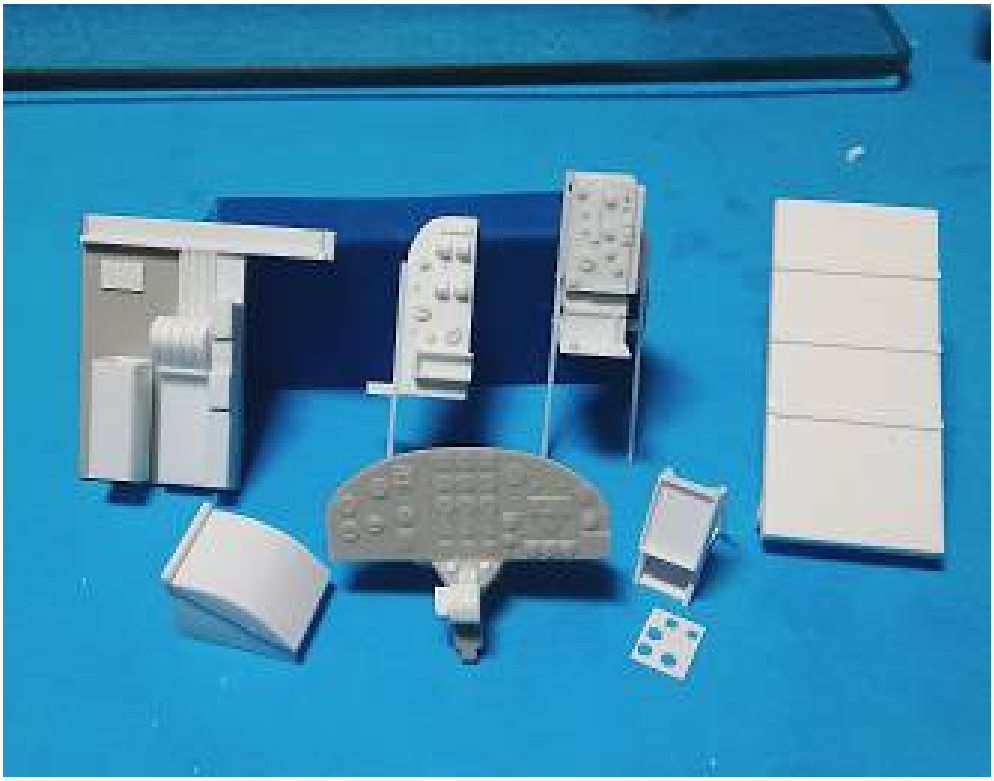


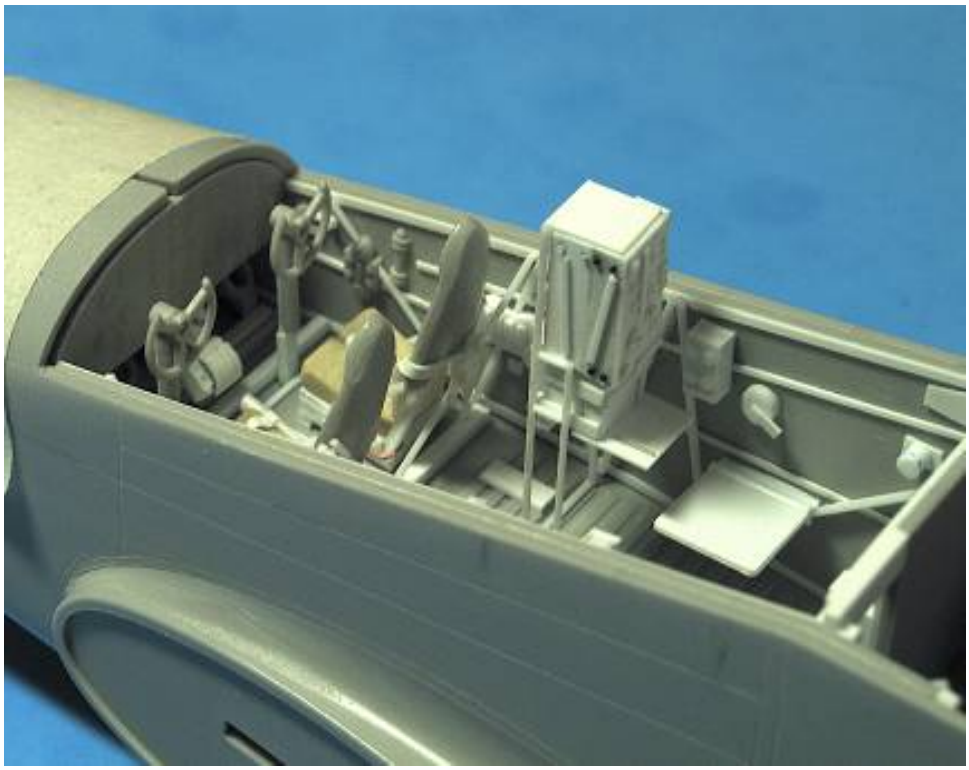


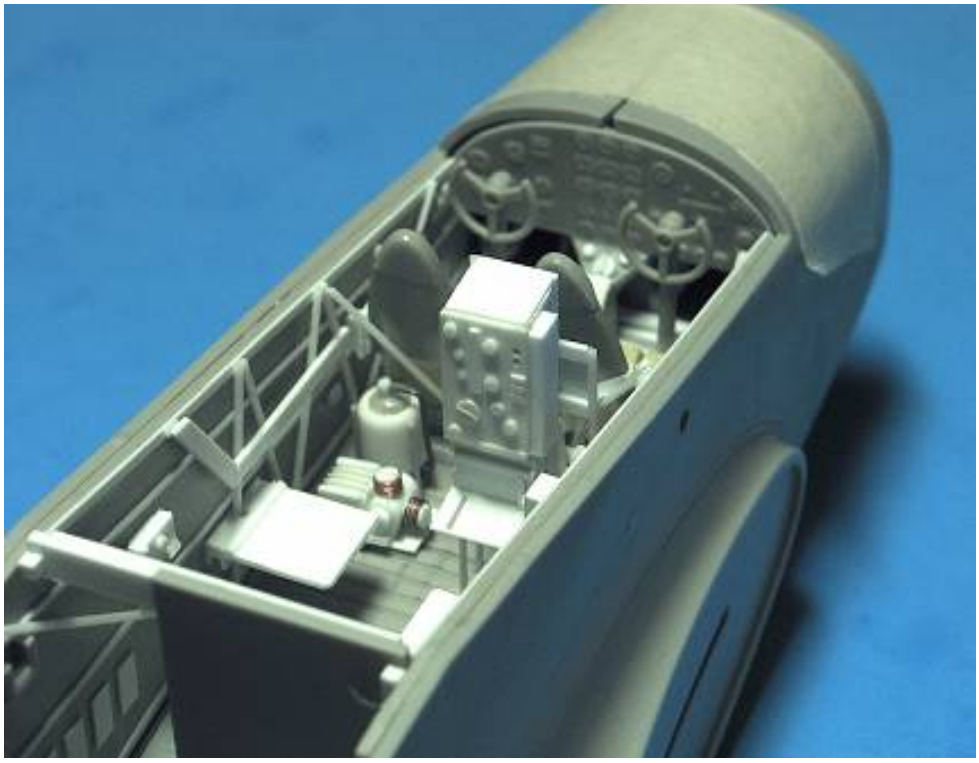


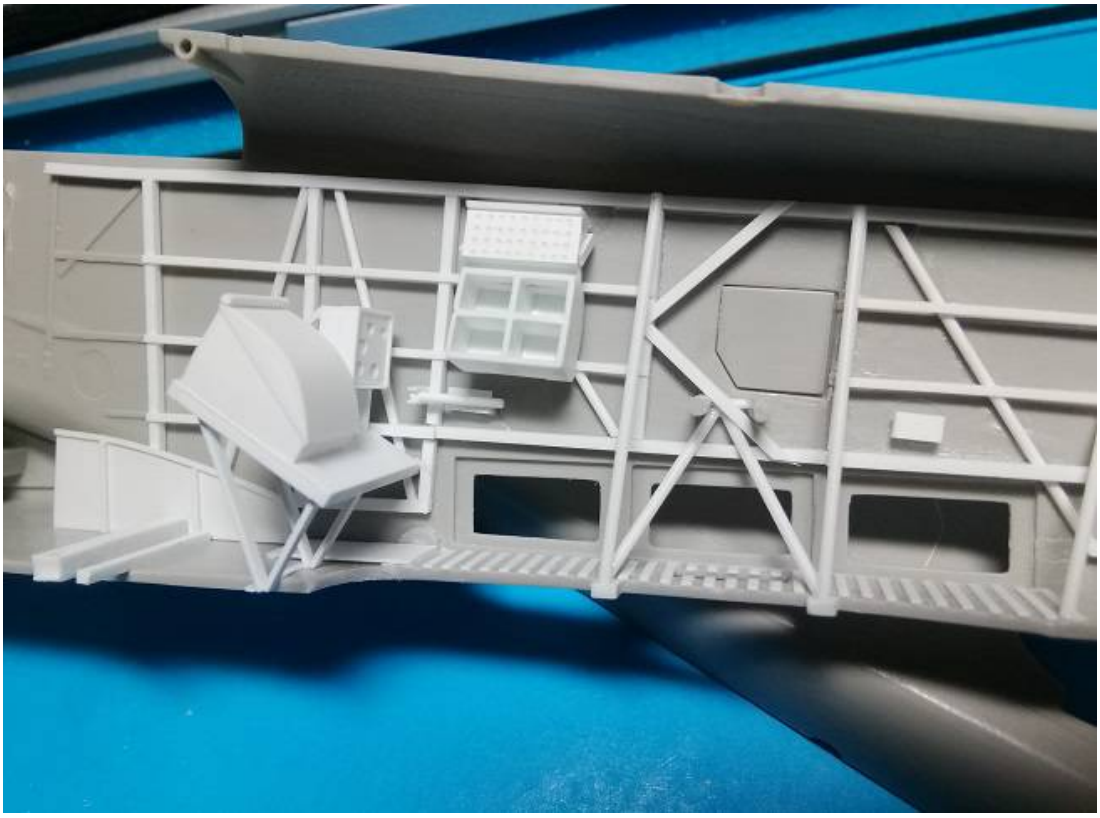




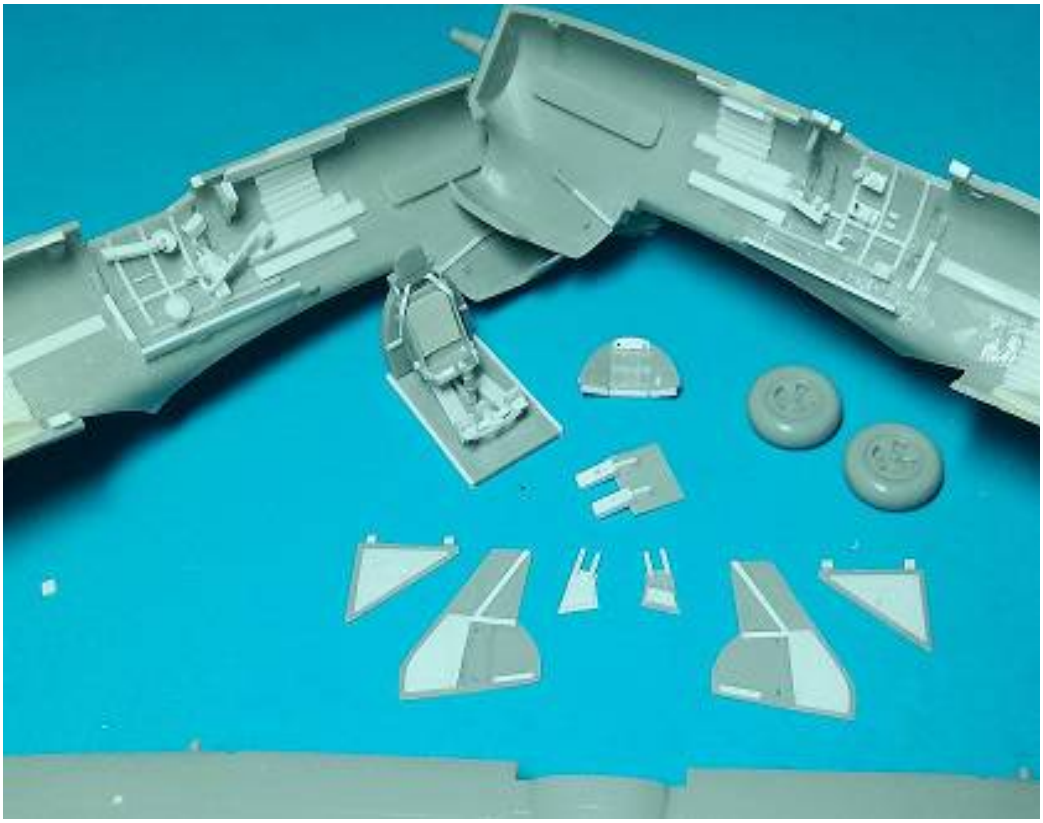


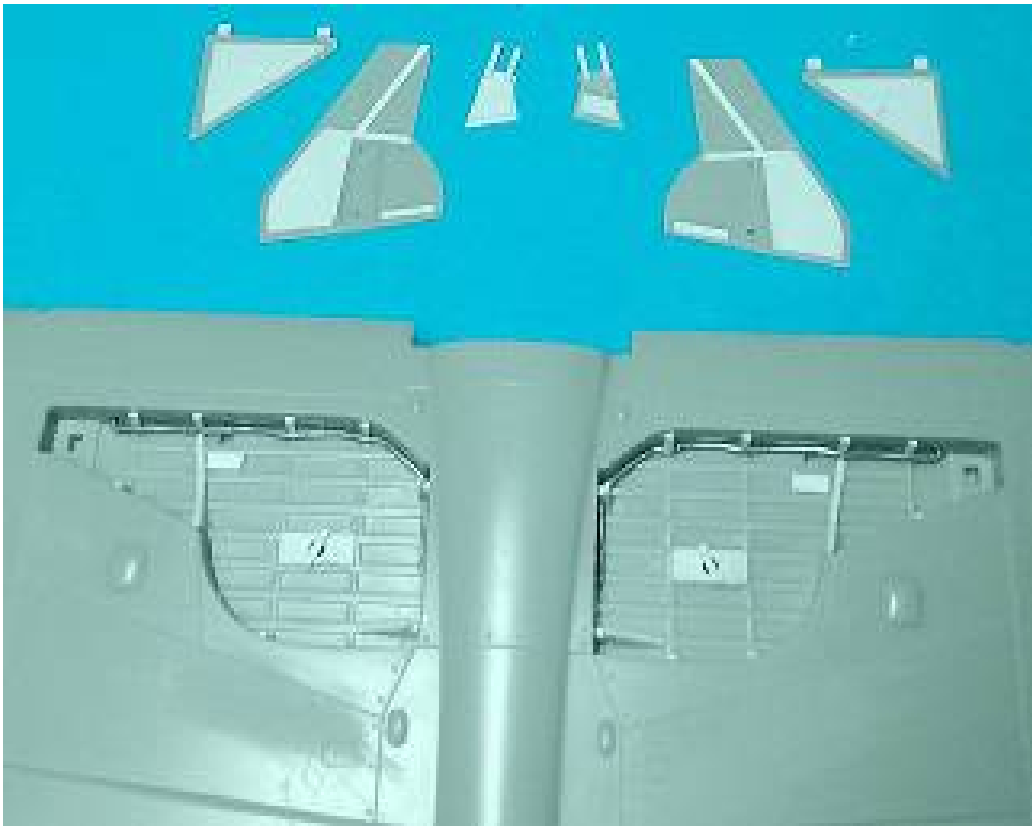






1/72 Airfix Tempest





Well thats all folks

John

Have a Safe and Very Merry Christmas Everyone and a Great 2021