

# small air forces observer

vol. 35 no.4 (140)  
April 2012

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**Argentine Canberra during the Malvinas Conflict**  
**The Korean People's Air Force: Part 4**  
**Dutch Fokker F.VIIa/3mM Bombers**  
**South & North Korean Spruce**  
**F-51 Mustangs in the Congo**  
**Dutch Markings & Colors**  
**Fokker Type Numbers**  
**Chinese MiG-9**

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Fuerza Aerea Argentina (FAA) Canberra B-105 in an Air Show at Buenos Aires in 1984. (Via Marcelo Siri)



Canberra B-105 with Malvinas mission markers and a "kill" marking for the destruction of VLCC *Hercules*. VLCC = "Very Large Crude Carrier". (FAA via Marcello Siri)



FAA Canberra, with Marcelo Siri as navigator, during bombing practice during the 1970s. (Marcelo Siri)



B-109 wearing the low-viz markings adopted near the end of the FAA Canberra's career. It is rumored that the surviving aircraft were painted in this scheme to confuse Chilean intelligence as to the true strength of the fleet as their numbers grew smaller in the run up to their retirement in 2000. (Santiago Rivas & Horacio Claria via Marcelo Siri)



# SMALL AIR FORCES OBSERVER

## The Journal of the Small Air Forces Clearing House

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**EDITORIAL:** This issue marks the end of our 35<sup>th</sup> volume. Enclosed you will find a renewal form that lists the current status of your account and the amount you have to pay to renew your subscription for Vol. 36. Please send your payment immediately to ensure that you receive all four issues of Vol. 36.

**COVER COMMENTS:** Fuerza Aerea Argentina Canberra B-105 of *II Brigada Aerea* at Air Base Parana in 1989. Captain Bigua Daghero (navigator) and Major Pastran (pilot). The experiences of the Argentine Canberra during the Mavinas War are described in this issue by Pablo Calcaterra. (Bigua Daghero via Marcelo Siri)



Canberra B-105 of *II Brigada Aerea* at Air Base Parana showing the armament range available to the B Mk 62. At the extremities of each wing are a pair of 1,000lb bombs on trolleys and in front is a spread of 25lb practice bombs. (FAA via Marcello Siri)

## **AUSTRIA**

**ÖFH NACHRICHTEN** (Oesterrichische Flugzug Historiker, Pfenninggeldf 18/2/14, A-1160 Wien. Write for free sample.)

**4/11** (40 pages) Sud Aviation SE 210 Caravelle-Jet der Austrian Airlines" 11 pages including 2 color photos, 17 b&w photos, 6 color profile drawings, and 5 tables listing history of each Austrian Caravelle both before and after Austrian Airline service. "MiG 21R in Zeltweg" 2 pages on Yugoslav MiG-21R including 4 photos and a profile drawing. "AVIS – Flug aus der Vergangenheit" 2 pages including 2 photos of Avis BS-11 'A-16'.

## **BELGIUM**

**KIT** (IPMS Belgium, c/o Michel Willot, dreve de Champagne 14, B-1190 Bruxelles; French & Flemish. International Postal Money Order for \$30 for 4 issues.

**#163** (52 pages) "Skyhawk in Belgian colours" 6 pages on modeling a US Marine Corps A-4E carrying a Belgium roundel including 6 photos and 2 color profile drawings. "Walkaround: A-4 Skyhawk" 4 pages with 9 photos. "Servans in Periculo" 4 pages on building a Dutch AB-412 in SAR markings including 9 photos of the model. "Close-up: AB-412 SAR" 7 photos of Dutch SAR helicopter.

## **FINLAND**

**MALLARI** (IPMS Finland, PL 798, 00101 Helsinki; 4 issues \$30.00 surface mail; \$37.00 airmail. No checks. Text in Finnish. [www.ipmsfinland.org](http://www.ipmsfinland.org).

**#182** (20 pages) "Supermarine Spitfire Mk XIX" 2 pages on Swedish S31 including 5 photos. "Spitfire PRXIX" 2 pages on the 1/72-scale Airfix kit including 8 photos (6 in color) of museum a/c. "Mil Mi-24V/VP" 2 pages on the 1/72-scale Zvezda kit including 6 photos (2 of the kit and 4 color photos of Soviet machines).

**#183** (20 pages) "Avro Anson Mk.I in the Finnish Air Force" 7 pages including 7 photos, a 1/72-scale 3-view drawing, 3 color profile drawings, and a color top-view drawing.

**#184** (20 pages) "Avro Anson Mk.I" a 3-page continuation of Anson in FAF service including 2 photos, 3 color profile drawings, and a color top-view drawing. "Dornier-museo" 4 pages on a visit to the

Dornier Museum at Friedrichshafen including 15 photos.

## **FRANCE**

**AVIONS:** Toute l'Aeronautique et son Histoire (Lela Presse, 29 rue Paul Bert, 62230 Outreau, France. 50 euro for 6 issues). Website: [www.avions-bateaux.com](http://www.avions-bateaux.com). E-mail: [contact@avions-bateaux.com](mailto:contact@avions-bateaux.com).

**#185 Janvier-Fevrier 2012** (72 pages) "FFS A/B 123: l'avènement des pilotes croates" 14 pages on training Croatian pilots in Germany including 38 photos (all Luftwaffe a/c). "Les 'tagazoux' de la CAP s'en vont en guerre" 9 pages including 22 photos. [Ed: The Civilian Air Patrol (CAP) was not a small air force, but a model of a Stinson 10A bearing their insignia (a white equilateral triangle inscribed within a black disc) will get your fellow modelers scratching their heads.] "Le groupe de chasse polonais III/3 en septembre 1939 (fin)" 10 pages including 24 photos (8 personnel, 7 Polish a/c, & 9 Luftwaffe a/c), table of Polish victories, and a graph of sorties by day. "1914-1918: La chasse française en Orient (part 3)" 14 pages including 38 photos, a map of the Salonika front, and 4 color profiles (Greek Ni-27, French Ni-24, Italian Ni-24, & Serbian Ni-24). "Les hydravions des avisos coloniaux (part 2)" 12 pages on pre-WW2 ship-born French a/c including 18 photos and 4 color profile drawings [Gourdou-Leseurre 832 (3) & one Potez 452]. "L'itinéraire d'un mécanicien de l'Armée de l'Air (part 4): Indochine, Algérie et ... retour à Persan-Beaumont" 25 photos on the post-WW2 career of Robert Rohr.

## **GERMANY**

**FLIEGER REVUE EXTRA** (Verlag Fliegerrevue, Herrn Detlef Billig, Oranienbamm 48, D-13469 Berlin. 4 issues per year, \$66 surface. Payment by check drawn on German bank.

**#35** (114 pages) "Der deutschen Torpedoflieger – Teil 3" 30 pages on Luftwaffe torpedo planes during the Spanish Civil War including 38 photos (He 59, He 60, Ar 95, He 111, & He 115). "Russlands fliegende Radarschirme" 28 pages on Russian "early warning" a/c carrying big radar dishes including 41 photos and 3 multi-view color drawings (Tu-126, An-71, &

Jak-44E). "1940/41 – Luftkampf um Indochina" 24 pages including 34 photos, one map (showing such exotic locations as Chochinchina, Annam, Tonking, Lao, & Khmer-Reich: previously known to me only from postage stamps), several tables showing air orders of battle, and 24 color profile drawings [French: MS 406 (5), Potez 25 (5); Potez 633, CMS 37, Farman 221, Loire 130, Potez 452, Potez 542 (2), DH-82. Thai: Curtiss H-75N, Curtiss Hawk III, Vought V-93S Corsair, Martin 139WS (2). Japanese: Ki 48 Lily & Ki 27 Nate.] [Ed: one Martin 139 carries Thai roundels and the other the rectangular Thai flag, but both have a red disc with an inscribed white elephant on the fuselage. Also of great interest is a photo of a Ki-30 Ann with Thai roundels.] "Vom Kolibri zum Sea Lynx" 24 pages on German ship-borne antisubmarine helicopters including 48 photos and technical descriptions of tactics.

## **ITALY**

**JP4 Menslie di Aeronautica e Spazio.** Via XX Settembre, 60-50129 Firenze, Italy. Email: [jp4@dueservice.com](mailto:jp4@dueservice.com). Website: [www.ediservice.it](http://www.ediservice.it).

**Novembre 2011** (100 pages) Photos: Egypt Airbus Military C295 '083' and India Boeing P-81 'IN320'. "H-6: The Last Bomber" 4 pages including 7 photos of the Chinese version of the Tu-16 Badger. "Incidenti Militari" 1 page including 3 photos (Angola EMB-120 & Su-22M-4)

**Dicembre 2011** (100 pages) Photos: Bulgarian Navy AS565 Panther and Afghan Cessna 208. "Aviación del Ejército de Colombia" 6 pages 12 photos (Blackhawk, Cessna 208, & CASA C.212). "L'aviazione della Polizia Federale Tedesca" 6 pages including 11 photos (EC155, AS332, EC135, & EC120). "Adequate Response 2011" 2 pages with 8 photos of Ukrainian Su-27, Su-24, Su-25, & MiG-29. "Royal Bahraini Air Force" 6 pages including 10 photos (F-16, F-5, BAC Hawk, Slingby T-67, S-70 Blackhawk, Avro RJ85, Bo.105, AH-1, & AB212). "Incidenti Militari" 1½ page including 4 photos [Bangladesh A-5C, Kenya Hughes 500, South Korea MD369, & Tianchi(?) BZK-006].

# EE Canberra BMk62 of the Fuerza Aérea Argentina

Pablo Calcaterra

After a successful tour of Latin America in 1952 during which the Canberra was shown off to the regional Air Forces, the type was purchased by Ecuador, Peru, and Venezuela. The Argentine Air Force tried to do the same. However, geopolitical considerations and some recent bad incidents (an Argentine Navy Catalina landed on Deception Island, an Avro Lincoln flying over the Antarctic continent, among others) were enough for the British authorities to reject the request. In 1965, contact was reestablished and a package that included Canberras and some Vickers VC10 for Aerolineas Argentinas was negotiated. But, the U.S. government lobbied against this and finally the Argentine airline purchased Boeing 707s. Thus, the second chance for Argentina to obtain Canberras was lost. By that time, the fleet of Argentine Avro Lincoln was clearly outclassed and the Air Force badly needed planes to restore the balance of power in the region.

In 1967, negotiations were again moving forward, but these were terminated as tensions between Argentina and Chile escalated and Queen Elizabeth II was asked to mediate. Therefore, the British could not be seen as siding with Argentina by selling them armament that could be used against Chile.

Finally, a transaction took place in 1969 when Argentina purchased 12 BMk2 and 2 TMk4 ex RAF. These planes were completely inspected (adding 25 years to their life) and after 10 major and 14 minor modifications requested by Argentina were made, they became Mk62 and Mk64 respectively. These modifications included communications, navigation, and external load equipment. The planes each had between 1,200 and 3,600 hours when purchased. The original planes and their Argentine serial numbers are:

msn	Ex RAF	Argentina
HP182P	WJ616	B-101
71233	WJ713	B-102
71234	WJ714	B-103
SH1656	WH913	B-104
71165	WH702	B-105
HP176P	WJ609	B-106
71203	WH727	B-107
SH1613	WH886	B-108
?2373	WH875	B-109
HP186B	WJ619	B-110

71416	WT476	B-111
71371	WJ875	B-112
The "lost" lot (purchased in 1981 but withheld and never delivered by BAC due to the 1982 conflict)		
SH1657 BMk2 to Mk92	WH914	?
XH583 TMk4 to TMk64	XH583	?

A BAC test pilot flew the first modified plane in 1970. In the meantime, a group of pilots were being trained on Peruvian Canberras. Another group of 12 pilots was trained in England. Upon ending their training, these latter crews flew the planes to their new home. On November 17, 1970, the first three Canberras, B-101 to B-103, arrived in Argentina.

During 1971, with the availability of the two trainers, crews started to be trained in-country while the squadron was gaining proficiency. The squadron was based in BAM Parana (Entre Rios) and constituted part of the II Brigada Aérea.

The first Canberra was lost in 1971 when B-103 crashed during a touch-and-go training exercise, but luckily the crew survived albeit with injuries.

During 1978, tensions again increased and Argentina and Chile were on the brink of war. The Canberras were transferred to Espora Naval Air Base (Bahia Blanca) but, as it is well known, the situation was defused by the intervention of Pope John Paul II.

The next plane to be lost was B-109, which crashed during a summer storm in 1979. The pilot survived but the navigator perished.

## The Malvinas Conflict

Now the timeline brings us to 1982 when the conflict between Argentina and the United Kingdom over the Malvinas (Falkland Islands) took place. At this time there were 10 Mk62 and 2 Mk64 in service, but only six and one, respectively, were ready for action. The balance was undergoing maintenance and tests. The first two planes (B-104 and B-110) were sent to Argentine Navy base Almirante Zar in Trelew (Chubut province) on April 10<sup>th</sup>. Three days later, it was the turn of B-105 and B-111. This became the primary base for operations and advanced maintenance. When B-108 and 109 arrived on April 16<sup>th</sup>, training to attack ships with Mk17 bombs

started. On April 21<sup>st</sup>, four planes (B-104, B-105, B-109, and B-110) flew over the Islands to familiarize the crews with the new environment and find critical navigation points. This type of operation was repeated several times before May 1<sup>st</sup>. During this time, a locally-designed chaff and flare dispenser was installed under the planes in the area of the photographic cameras housing.

(For the remainder of this article, I am going to focus on the missions that B-105 flew. I will also describe other missions where B-105 might not have been involved but were, nevertheless, significant or interesting. Please note that there were more OF (Note 1) and missions than the ones I am writing about.)

### April 25<sup>th</sup>

On this date Operation Paraquat started (the retaking of the South Georgia Islands) and a counter attack was launched against the British Task Force. Three planes took off from Base Almirante Quijada (Rio Grande) on April 26. Due to the distance involved, an internal fuel tank with 3,300 lt. was installed in the bomb bay along with the wing tip tanks. Therefore, only two 1,000-lb Mk17 bombs could be carried under the wings. After the attack, the planes were to land at Puerto Argentino/Stanley (Malvinas) to refuel and then continue to the continent. Navigation support was given by a Boeing 707 and a KC-130H Hercules from I Brigada Aérea provided tactical control. The Canberras involved were B-105 (Squadron Leader Mj. Vivas and Capt Escudero), B-108 (Sproviero/Moreno) and B-109 (Baeza/Cardo). Capt. Casado gave the navigator of B-109 some calculations that showed that in case the fuel ran out, if they were at 12,500 meters altitude, they could glide another 160 nm without engines. No piece of helpful information was left out! On the 26<sup>th</sup>, the moment arrived. The planes were even refueled on the runway before taking off to make up for the consumption from start up until arriving at the runway. They flew at 35,000 feet to reduce fuel consumption. South of the Malvinas, while in complete radio silence, they jettisoned their wing tip tanks. But, one of B-105's tanks did not release. Since fuel consumption would become too high command was turned over to Capt Baeza in B-109, and B-105 returned to base. The two remaining planes continued with the mission. When the 707 broke formation, the Canberras dove to the surface of the sea for their last leg. The crews were worried about suffering damage by small anti-aircraft fire that would not allow them to

return to their base due to lack of fuel. (They didn't worry about a missile strike since it was thought that *it* would destroy them immediately) Upon reaching the target area, there was significant cloud cover and the Hercules crew was only able to inform them that there were two warships in Cumberland Bay, but there were no details as to exactly where they were. Clouds were also hiding the hills around the bay – therefore, the mission was aborted.

They managed to regain contact with the Boeing that guided them to Puerto Argentino. When they were 150 km away from the airport they checked their remaining fuel and realized that they could return straight to the continent with no need for an intermediate stop. The planes returned to Rio Grande. Another mission was prepared for the following day, but since the Argentine garrison on South Georgia had already surrendered, it was cancelled when the planes were ready to take off.

### May 1<sup>st</sup>

On this day, the fighting war really started around the Islands. As it was assumed that British troops were getting ready to land around Puerto Argentino and that there were landing craft in the area, it was decided to send two Canberra missions against them.

OF 1111: Call sign RUTA with B-105 (Capt Nogueira/Sanchez), B-108 (Capt Rodino/1<sup>st</sup> Lt Dubroca), and B-109 (1<sup>st</sup> Lt Lozano/Lt Cooke). They took off from Trelew and flew south east, but they did not know that in their path HMS *Yarmouth* and HMS *Brilliant* were chasing the Argentine submarine ARA San Luis that had fired torpedoes against a British warship (they did not explode). The ship's radars detected the incoming Canberras and they fired some surface-to-air missiles. The bomber crews could see the ships in the distance and their missiles being fired. A Sea Cat fired by Yarmouth exploded close to B-108 and destroyed the wing tip as if it were made of paper. B-108 almost hit the sea. Rodino radioed, "I have been hit. I cannot control it. I am going to the Island!" By violent maneuvering, he avoided the rest of the missiles. Then, on route to the Island, he found himself almost on top of the aircraft carrier, HMS *Invincible*, from which Harriers were taking off. So he turned around again and this time he decided to try to return to the continent. He arrived in Puerto Deseado (Santa Cruz) while the other, undamaged, planes returned one hour later to their base (Trelew, further north). B-108's wingtip was repaired by

civilian millwrights and was able to return to action before the end of the war...more about B-108 latter.

The other Canberra mission on this day was OF 1117: Call sign RIFLE with B-102 (Capt Baigorri/Mj Rodeyro), B-110 (1<sup>st</sup> Lt Gonzalez/Lt. De Ibanez), and B-104 (Capt. Garcia Puebla/1<sup>st</sup> Lt Segat). They listened on their radio to the conversation and shouts given by RUTA during their engagement. RIFLE was flying in clouds and the tension was so high that they did not realized they legs were shaking, that their seats were uncomfortable, or even that they were sweating a lot! Garcia Puebla, in B-104, noticed that RIFLE 2 was flying slightly higher than the other two Canberras. He told him: "RIFLE 2, come lower!" When they were 300 km away from the target, HMS *Invincible* detected them and a CAP of Sea Harriers (Lt. Cdr. Broadwater in ZA175 and Lt. Curtis in XZ451) was launched against them. Garcia Puebla, in B-104, had decided to lag behind to avoid the explosion of the bombs of the two planes ahead of him during the attack. When the Canberras were only 24 km away from the carrier (they did not know that HMS *Invincible* was just ahead of them) the SHAR (Note 2) pilots gained the tail of the bombers. At that moment, something made Garcia Puebla look to his right more than he would normally and comfortably do. From the bottom of a cloud, a fine white smoke streak appeared. It was the first Sidewinder fired by Curtis. The missile was flying very fast and parallel to RIFLE 3, towards RIFLE 1 (B-102). Garcia Puebla shouted: "Pajaro, abrite, un misil!" (Bird – Baigorri's nickname – break, a missile!). Baigorri answered with an order to his wingmen: "Ruptura! (Break!)" Garcia Puebla pushed the throttle thru the gate and kicked his rudder pedal to his left while pulling and turning the steering in the same direction. He told his navigator to drop his flares and chaff every 15 seconds. The sea was just inches away from his left wing tip, but he was able to keep his eyes on the incoming missile. At the same time RIFLE 1 was turning to the right. RIFLE 2 (B-110) was flying slightly higher and not turning as violently as the other two Canberras. Garcia Puebla shouted: "Guarda el 2, GUARDA EL 2 (Watch out 2, WATCH OUT 2!!)" Then: "Vire carajo (Turn, damn it!)" and "Dios! (God!)" The missile entered B-110's right engine, but it did not explode. RIFLE 3 lost sight of RIFLE 2 due to his turn, but the leader was able to see two ejection seats coming out and their parachutes deploying. Curtis fired another Sidewinder at B-110, but it missed as the Canberra had already impacted the sea. Broadwater fired

missiles at the other Canberras with no effect although a Sea Lynx in the area reported that he had hit another bomber so Broadwater was credited with a kill.

During the engagement, Segat, in B-104, told his pilot to jettison their wing tip tanks. It was good advise since, with the tanks in place, the Canberra could not exceed 700 km/hr. Three times the pilot tried to eject them, but due to the Gs he was pulling, he only managed to get rid of them on the fourth try. The Canberra lurched forward and at the same time an explosion was felt in the tail area. Just a few instants before Segat had dropped another flare. Garcia Puebla thought they had been hit, but after checking the instruments he realized the plane was still in good shape. It is believed that the flare that Segat launched a fraction of a second earlier had managed to attract the Sidewinder thus saving the Canberra. Garcia Puebla asked his leader what to do and he was told to return to base individually and to get rid of his bombs. Thus, they were able to increase their speed even more.

While Garcia Puebla was trying not to crash against the waves and was fighting the vibrations, Segat was checking the speed. This allowed him to warn his pilot that they were exceeding the maximum allowed speed. They were doing more than 950 km/hr - maximum speed to avoid structural damage is 850 km/hr! Lowering the speed, Garcia Puebla flew even closer to the sea. After some minutes they realized that they had lost the attackers. Later on their relief became anguish. In the fading light they saw on the misty sea that gray ships were surrounding them and there was no way out. Since they were close to the continent, they finally realized the ships were part of the Argentine Navy. Garcia Puebla told his Navigator to get in touch with the "Navis" while he was checking outside in case they came under attack (blue on blue). Segat called "LOBO – MATIENZO" and immediately they received several requests to confirm their identity. This being done, they also reported that the Harriers had intercepted them and that there was a Canberra crew waiting to be rescued in the sea. The Argentine Navy sent Aviso Alférez Sobral (Note 3) to the rescue. The two RIFLES returned to their base where the mood was somber. They all went to their chapel to pray and then, with their spirits restored, they prepared for the follow-on missions. De Ibanez and Gonzalez were never found.

Contrary to some versions still on the Internet (Note 4) that claim the *Aviso Somallera* was sunk,



only the *Aviso Alferez Sobral* was attacked by British helicopters. During a night combat the bridge *Sabral* destroyed and the commander along with seven crew members were killed. However, after several days at sea, the *Sobral* managed to get back to the continent. With a new bridge, she is still in service in the Argentine Navy.

From now on, all attacks by Argentine Canberras were to take place at night. Also a change to BAM Rio Gallegos as a base to launch the attacks was implemented. This decision left the planes 1,200 km away from Trelew.

Once the British troops had landed at San Carlos Strait on May 21, the first mission took place on May 26<sup>th</sup>

#### **May 26<sup>th</sup>**

OF ?: call sign ODIN with four Mk17 bombs each. B-104 (1<sup>st</sup> Lt Mauad/Siri), B-105 (Capt. Bredeston/Capt. Sisco/Piazza), and B-108 (Freijo/Marin). After flying 180 nm the attack was called off due to lack of visibility.

#### **May 27<sup>th</sup>**

OF 1240: call sign ODIN. With four Mk17 bombs each, B-101 (Mj Vivas/Capt Escudero) and B-104 (Capt Freijo/Capt Marin). Even though B-105 was not involved in this mission, I want to mention it because it was the first effective Canberra bombing mission. Flying very low and in high winds, the two bombers flew from south to north over San Carlos Strait (Falkland Sound). After passing Darwin on their right, they dropped their wing-tip tanks and accelerated. They arrived over the beachhead using the Doppler radar of B-101 and, close to the pier they dropped their bombs on small fires seen on the ground (troop concentrations?). They did not receive any anti-aircraft fire and escaped at 1,000 ft for almost 150 nm. During the mission they kept absolute radio silence and they communicated using only their formation lights.

#### **May 31<sup>st</sup>**

OF 1260: call sign CHARRUA. Again with four Mk17 bombs each: B-102 (Capt Martinez Villada/1<sup>st</sup> Lt Pagano), and B-105 (1<sup>st</sup> Lt Rivollier/1<sup>st</sup> Lt Annino). They were to bomb San Carlos again. When they got to San Carlos at 0200, blanket of fog was hiding the target. Therefore, they bombed, using Doppler, from 700 to 800 feet and at a speed of 400 knots. Rivollier was able to see the eight blasts in the middle of the night. There was no defensive fire again.

OF 1270: call sign ODIN. Same armament as in previous missions: B-105 (Capt Bredeston/Capt Sisco) and B-109 (1<sup>st</sup> Lt Mauad/1<sup>st</sup> Lt Acosta). They followed up another mission (OF 1269) led by Capt Pastran and Cap Casado that bombed San Carlos effectively. ODIN arrived over the target, dropped their bombs with no problems and returned to Rio Gallegos. There was lots of rain in the target area. As a result of these missions, a tent at Eagle Base was demolished and a phone central was damaged. Although there was no damage to the Sea Kings found on the base, there were casualties among the British troops. Because of these attacks, the Sea Kings were deployed back to the ships during the night.

Capt. Carballo, the famous Skyhawk pilot and who was from the same promotion as Bredeston, tells the following anecdote. It turns out that Bredeston was frustrated that he had not been able to complete a mission or hit the enemy positions during previous nights. Finally, during the one just described, he was able to fulfill his duty and with a big smile he was able to go to sleep. Having learned of the success of the mission, Capt. Carballo and Capt. Perroto (a C-130 pilot also from the same Promotion) entered the room in the wee hours, grabbed some flying boots and pounded poor Bredeston by surprise! Nice way to congratulate him!!

OF 1273: call sign HUINCA. In this case the bomb load was reduced to three per plane: B-108 (Mj Chevalier/1<sup>st</sup> Lt Lozano), B-105 (Capt. Bertoldi/1<sup>st</sup> Lt Reyes), and B-109 (Capt Garcia Puebla/1<sup>st</sup> Lt Segat). B-105 had to return, as one of the fuel tanks was not transferring its contents to the engines. Segat tells some details about the mission: After adopting a high-low profile, they entered clouds and they could not see the sky nor the sea. He was calling out the directions to Garcia Puebla "to the right...to the left...higher, lower, not so much..." They could see nothing outside. They were to the south of Soledad Is. (East Falkland) and they turned north to start their bombing run. The radar altimeter, showing 50 meters, started to give different readings. This meant that they were now flying over ground. He kept on asking his pilot if he was able to see anything outside, but the answer was always negative. It was getting even darker! Suddenly, Garcia Puebla said: "I can see a white shadow ahead" to which Segat shouted back: "Climb! Climb!" It was Mount Kent. The Gs pushed them against their seats. The radar was showing the presence of the mount just ahead of them, all covered



in snow. They opened the bomb bay doors and dropped their load. The plane shook with the explosions and they could see the red glow behind. Now they were 1,000 ft high and therefore they were vulnerable to interception. They dove to 60 meters and then Segat told Garcia Puebla to steer 030 to return to their base. The radar in Puerto Argentino was tracking them, but was unable to communicate directly with the Canberras. Two minutes after their attack, the radar tried to tell them that Harriers were after them, but there was no direct contact. In such a desperate situation, Puerto Argentino called the continent that in turn, thru Rio Gallegos, managed to contact the Canberras. Andy McHarg from HMS *Hermes* had been launched and vectored in order to chase the Canberras. Garcia Puebla saw a missile to their right and told his navigator: "Drop the chaff!" Segat dropped flares and chaff at different intervals. The Canberra crew felt an explosion behind them that is believed was the explosion of a surface-air missile that had been lured by the antimissile measures. By now McHarg was really close to the Canberras. His fuel situation, though, was critical having flown very far away from his mother ship. He managed to identify the Canberras visually (he was now only 4 miles behind). When the explosion happened the Canberra dropped their wing tip tanks and accelerated. McHarg saw the enemy dropping their tanks and pulling away, but he was not able to continue with the chase and returned to HMS *Hermes*. (He does not mention any explosion behind the bombers.) The Canberra reached their height for their return leg and returned to base safely.

#### **June 4<sup>th</sup>**

OF 1276: Call sign PUMA with B-105 (Capt Freijo/1<sup>st</sup> Lt Pagano) and B-101 (1st Lt Heredia/1<sup>st</sup> Lt Gerez). They dropped their bombs on their target (Mount Kent) using their Doppler radar and with their position validated by the Argentine radar in Puerto Argentino (Stanley). PUMA 1 pulled ahead during their escape from the area, but then reduced speed to wait for PUMA 2 to catch up. The radar (CIC) warned them that there was an enemy CAP 25 miles behind. The Canberras accelerated to Mach 0.85. The CAP stopped chasing them when they were 18 nm **behind**. Over Darwin, now in British hands, they dropped flares and chaff. But their adventures were not over. Over Gran Malvina (West Falkland) they were informed that there was yet another CAP hunting them. They dropped chaff and flares and

finally were able to see their enemies, which turned out to be two missiles - not Harriers. These missiles had lost tracking and were easily left behind. The Bombers returned to base without any more adventures.

#### **June 8<sup>th</sup>**

The Canberras flew one of the most controversial missions of the war. They were based for a day in Mar del Plata and from there they took off in the afternoon. Six hundred miles from the Argentine coast, the Liberian tanker *Hercules* was identified as a potential supply ship for the British Task Force by C-130 TC-68. The empty 220,000 tons super tanker was on its way to Alaska to get another load of crude. According to the captain of the ship, jet bombers (the Canberras?) dropped eight bombs, one of which hit the ship but did not explode. The ship sailed to Rio de Janeiro (Brazil) to get the bomb defused. On July 20<sup>th</sup> the ship was sunk off coast of Brazilian coast – allegedly to claim the insurance money. The Argentine Air Force denied that the attack ever occurred. The planes allegedly involved were B-102, B-105 (Chevalier/Pagano), B-108, and B-109 and it is believed that they each carried two Mk17 bombs. The shipping company sued the Argentine Air Force in the US Supreme Court, but the case was dismissed. For a while, B-105 carried the kill mark of a ship on her nose.

#### **June 10<sup>th</sup>**

OF 1309 with call sign LEON: B-105 (Capt Martinez Villada/Mj Escudero) and B-112 (1<sup>st</sup> Lt Rivollier/1<sup>st</sup> Lt Annino). As the wingman could not take off, the leader joined TIGRE 1, another Canberra whose wingman also failed to take off. Their target was again Mount Kent. After seeing lights at low height over the sea and when they were getting close to their target, the Puerto Argentino radar told them to return as there were air threats in areas around them. The mission was not completed.

#### **June 12<sup>th</sup>**

OF 1310, call sign TAURO: B-111 (Mj Vivas/1<sup>st</sup> Lt Rocco) and B-105 (Capt. Pastran/Capt Casado). They flew low over the sea towards their target. As they turned to approach the area west of Puerto Argentino (Stanley), they tried to drop their wing-tip tanks, but the ones on the left in each plane failed to release. Therefore, they were forced to return to their base.

OF 1315; call sign ROMA: B-105 (1<sup>st</sup> Lt Rivollier/1<sup>st</sup> Lt Annino) and B-1xx (1<sup>st</sup> Lt Heredia/1<sup>st</sup>

Lt Gerez). They reached the southern part of San Carlos Sound, but they were forced to return as they saw some missiles being fired ahead of them. The leader's altimeter was not working and the low temperatures caused frost to form over their canopies and they were not able to see outside.

OF 1316; call sign BERLIN: B-104 (Capt Martinez Villada/1<sup>st</sup> Lt Pagano) and B-102 (Capt Garcia Puebla/1<sup>st</sup> Lt Segat). The leader returned with a faulty fuel system and Garcia Puebla continued to the target alone. Though B-105 was not involved in this attack, it is a very interesting one so I am going to go thru it using Garcia Puebla's report.

Feeling lonely after losing their leader due to a mechanical issue, they continued with the mission. Their target was close to the Argentine positions and they were concerned about hitting them by mistake. They started to descend and they prayed an Our Father asking the Lord to allow them to get to their target and if possible to hit it. Now flying very low they flew in and out of clouds and rain with zero visibility. Using their radar, they were able to turn towards their target. They checked their remaining fuel and found out that it was lower than what it should be so they reduced their speed which would allow them to get to the target and back to base but would also make them more vulnerable to the enemy anti-aircraft fire. When the clouds broke, they could see enemy ships on both sides! They further lowered their height and their altimeter was reading zero. Garcia Puebla was keeping his height using the reflection of the moon on the surface of the sea. He changed the direction in order to try to minimize their exposure to the enemy frigates while flying with enemy ships 8 miles to each side. They were finally able to leave the ships behind. Segat started to doubt his navigation equipment and that could be the explanation of the higher than expected fuel consumption and the presence of the enemy ships. Accepting Segat's comment meant failure, but Garcia Puebla told his navigator not to worry, as he was sure they were going to hit their target. Segat answered that he believed him although all evidence was against them! With the cockpit and instruments lights off to improve their night vision, flying in and out of rain in the middle of the night, they were lost. Suddenly there was a distant light shining low to their left. It could be either a star or a fire. It would be their last chance to find the islands. One minute later, they realized it was a fire. It was Kent Mount. Garcia Puebla exclaimed, "We've got them!"

He called the radar in Puerto Argentino (Stanley), but received no answer. They started to see some of the shapes of the island in the middle of the dark when, suddenly, there were lots of lights ahead and to the left. They had turned on all the lights in the town! With that help, Garcia Puebla was able to pinpoint the target that was located between the town and Mount Kent. He climbed slightly to start his bombing run and to avoid the hills behind the target. At that moment the radar came alive warning them: "Message to the plane that is arriving from the north. There are two CAPS flying towards you". The Argentines believe that the frigates had not fired because they had passed the information to the aircraft carriers. They dropped their bombs in the correct spot, the plane jumped, and they could see the red sky and feel the explosion of the bombs. It was 20 minutes after midnight on June 13<sup>th</sup>. They were told that one of the Harriers was close to Mount Kent and had turned south. The Canberra crew turned off the radar. They had crossed head on with the Harriers! After he passed over the hills the pilot dove and shouted to his navigator: "Jorge, grab the top ejection handle and if you feel a hard vibration, eject. Don't wait for my order as they are hot on us!" Garcia Puebla accelerated to maximum speed and was about to eject his wing tip tanks to improve his escape speed when he remembered that there a few left back at the base, so he decided to keep them. He had two chances: to eject them and disobey his orders or to keep on flying fast risking the plane due to structural damage or the lack of fuel. He decided to reduce his speed to 380 kt to save fuel. When he did this, he thought: "I am giving too much advantage to the British!" His eyes were jumping from the water to his tail and back to the sea. He was also grabbing his ejection handle when looking forward but had to let it go when looking behind. Still flying low, they had two options: either fly low over San Carlos risking being shot down by the Harrier or start to climb to save fuel. He picked the second option while Segat was telling him how many miles they had flown since they had left their target. With this he was wondering how much longer would the Harriers chase them? Thirty miles from their target, Garcia Puebla started to climb while he said: "Well my friend, let it be God's will!" At that moment, the entire cockpit was lit and they heard a noise. He thought it was the end, but then realized that it was Saint Elmo's fire. Minutes passed very slowly. Eighty miles. Still not caught..... it seemed unbelievable. Garcia Puebla

exclaimed that he believed that they were going to make it, but Segat told him that they were lost, as his navigation equipment was not working. Now they were flying at 40,000 ft and their only chance was for the radars on the continent to find them. Their only alternative was to eject in the middle of the night in the South Atlantic. He started to call the radar on all the frequencies. Finally he was answered: "Continue!" They shouted with happiness when the radar operators told them that they were on their screens. Now that they were sure they were going to make it they started to think about their families. When they landed they shouted: "Long live the Fatherland!", which was echoed by the radar and the tower. It was 2 am on June 13<sup>th</sup>. A message was received from the islands thanking them for their effort and telling them that the bombing had been very successful. With the happiness of having fulfilled their mission they went to sleep.

I have transcribed this mission in detail to show the courage and will of this Argentine Canberra crew.

### June 13<sup>th</sup>

The last mission of the Canberras was flown around midnight on the 13<sup>th</sup> when B-109 (Rivollier/Annino) and B-108 (Capt. Pastran/ Casado) bombed Mount Kent. A Sea Dart fired by HMS *Exeter* shot down the second plane, the same one that had been damaged on May 1st. Pastran told Casado to eject but Casado answered that his seat was not working (probably damaged by the explosion of the missile). After losing control of the plane, Pastran told his friend that he had no other option but to eject but he received no answer from Casado. Pastran fell in the water, inflated his dinghy, and managed to get to the coast where he was captured by British troops. Casado crashed with his plane thus becoming the last loss of the Argentine Air Force during the war.

Another significant effect of the actions of the Canberras (and Hercules) during the night was a couple of Canbelow missions that were carried out by HMS *Invincible* on June 4<sup>th</sup> and 7<sup>th</sup>. The idea was to position the carrier closer to the continent and shoot down any enemy plane that tried to approach the Islands. On the 4<sup>th</sup> heavy fog prevented the British from launching the Harriers even though there were two Canberras on a bombing mission. On the 7<sup>th</sup> a couple of Harriers were sent to chase a bogey (a C-130?) but this turned back to the continent before they could intercept it.

In balance, the squadron flew 33 successful sorties (meaning that they were able to reach the target and drop their bombs). There were in total 236 flights and B-111 and B102 were the planes flown the most. But in terms of successful sorties the ones that flew the most were B-105 and B-108 (shot down during the last mission as seen above). During these missions the Canberras dropped a total of 38.6 MT of bombs with the loss of three crewmembers and one POW.

### After the war

Their activities continued but gradually less hours were flown each year. A Bendix RDR 1400 radar was installed on B-101 (and used it during the war) and on B-104 and B-107 after the war. It is believed that the asymmetrical configuration led to the accidents that destroyed two planes in 1982 and 1983 respectively. As a consequence this equipment was removed from B-101. The role of the planes switched from bombing to photography. Very few hours were flown in the '90s with B-102, B-105, and B-112 being removed from flying in 1998. There were now only three planes left (B-101, B-109, B-111) that kept on flying training missions and air shows. The final official flight of the Canberras in Argentina took place on April 5<sup>th</sup> 2000.

Pablo Calcaterra (SAFCH #1728), Canada.

### Notes

1. OF = Orden Fragmentaria: Information on mission sent ahead of the mission itself.
2. SHAR is the code used by the Argentine controllers for the Harriers.
3. An Aviso is a small ship very lightly armed.
4. [en.wikipedia.org/wiki/ARA\\_Alferez\\_Sobral\\_\(A-9\)](http://en.wikipedia.org/wiki/ARA_Alferez_Sobral_(A-9)).

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# Fokker F.VIIa/3m Trimotor in LVA Service

or

## Converting Airliners into Bombers in time of War

Frits Gerdessen

Convinced that the Dutch economy could never financially support a strategic bomber force, the Luchtvaartafdeeling (LVA) considered that, in the event of war, they would rely on converting Royal Dutch Airlines (KLM) civilian aircraft into bombers. This idea, as far as known, was first raised in 1925.

On 1 December 1925, KLM, possessed 18 airliners. Ten of these (1 DH.9, 2 Fokker F.II, and 7 F.III) were powered by the 240 hp A.S. Puma and each could carry only 400 kg of bombs. The LVA considered this bomb load insufficient. The remaining 8 KLM transports (2 Fokker F.III and 6 F.VII) had 380-400 hp engines that made them usable as bombers. (A Koolhoven FK.31 was also listed among the KLM aircraft, but this was a military two-seater that was never used by the KLM.)

In 1926, the wartime organization of the LVA included, on paper, one and later two bomber units (Bombardeer Vliegtuig Afdelingen, or BomVA). In wartime, these would be equipped with converted KLM aircraft. The crews would be KLM pilots since nearly all were LVA reservists. It was optimistically assumed that a Fokker airliner could be converted into a bomber within a few days - provided the military equipment was available.

Fokker had military versions planned for nearly all types from the F.VII on, as well as for a number of un-built projects. The original single-engine F.VII appeared in 1924 (5 built). This was followed by the F.VIIa ~~with~~ ~~by~~ a single radial engine - of which 40 were built. Next came the ~~famous~~ F.VIIa/3m; a trimotor version of the F.VIIa. The military version of the F.VIIa/3m was the F.VIIa/3mM - military conversions of F-type airliners had the suffix M added to the type number. The LVA would order three F.VIIa/3mM out of a total of 18 built. (Note 1)

### The LVA Fokker F.VIIa/3m

Even if it turned out to be feasible to turn airliners into bombers after the start of a war, the LVA realized that it would be necessary to have some multiengine Fokkers of its own in peacetime to provide night-flying training for bomber crews and to serve as the

nucleus for a bomber force. Thus, in December 1927, three F.VIIa/3mM were ordered from Fokker in two contracts. One contract was for two newly-built aircraft at f 47.500 apiece. The other contract was for the civil-registered H-NAEA for f 40.000. (This is the aircraft that had been used for a pioneering flight to the Netherlands East Indies by Lt. G.A.Koppen.) H-NAEA was brought to the same standard as the other two except that it lacked the photo hatches in the floor.

The first two F.VIIa/3mM were given serials 801 and 802, and fuselage numbers (rompnrs.) 5034 and 5035. (Note 2) They were accepted on 21 February and 9 March 1928 respectively. Aircraft 803 (ex H-NAEA, rompnr. 5006) was accepted on 8 May. However, on the 25<sup>th</sup>, the undercarriage of 803 collapsed and the wing was damaged. After repairs, its civil registration was cancelled on 28 February 1929. On 10 April, 803 crashed again - this time due to engine failure while taking off from Soesterberg.

With the LVA reorganization on 1 February 1930, the Proefvliegtuigafdeling (PVA = experimental unit) received the three F.VIIa/3mM. The PVA was to be the nucleus for wartime bomber units (augmented with KLM aircraft). In the first years, the PVA did a lot of experimenting with bombing, sometimes with all the F.VIIa/3mM at once. The F.VIIa/3mM could carry 700 kg of bombs on racks under the fuselage: 4x50, 3x100, and 4x50 kg. Tests were also made with the bombs mounted within the fuselage, but information about this installation is no longer available.

The F.VIIa/3mM were intensively used for a variety of tasks: training, night flying, a flying classroom for four observers and wireless operators, transport (e.g. a trip to the RAF Display at Hendon in 1931), topographic photography (Note 3), observer corps training, representing the enemy during exercises, etc. For observer training, racks with small practice bombs were carried.

In 1937, the PVA was incorporated into the Strategische Vliegtuiggroep (Strategic Group). By 1939, the LVA's F.VIIa/3mM were well worn, but



802 had been overhauled and in 1939 it was issued to the Observer School. Once the current observer course was finished, a new one was not started, and 802, normally based at Haamstede, was often used as a hack, e.g. transporting personnel with their bicycles on weekend leave from Texel. The 801 and 803 now were completely worn out and on 23 March 1940 the D.LVB (Directeur Luchtvaartbedrijf = Director Military Aviation Factory) asked the IML (Inspecteur Militaire Luchtvaart) for permission to retire them. The IML replied on 4 April, but his answer is not known. On 2 May, 803 brought a crew from Schiphol to Soesterberg to ferry T.5 852, which was undergoing repair, to Fokker.

The new OLZ, Gen. H.G. Winkelman, who succeeded Gen. Reijnders on 6 February 1940, inspected the Dutch defenses from the air with an F.VII. He found this most instructive and he advised local commanders to do the same. Thus, 802 piloted by Lt. F.J.A. Lutz, came to Soesterberg from Haamstede and made several flights from 27 March until 4 April. Lt. Lutz received assistance from personnel of 2-V-2 LvR, the resident Fokker D.17 unit. (Note 4)

The 802 was lost at Haamstede during the German invasion on 10 May 1940. Nothing at all is known about the fate of the 801 and 803 during the war days.

## **Airliners into Bombers?**

Let us now turn our attention to the question of the feasibility of converting airliners into LVA bombers after a war breaks out. On 19 March 1935, the CGS (Chef Generale Staf) asked the C.LVA, kol. P.W. Best, about the status of the planned conversion of KLM aircraft into bombers. After consulting with Fokker, on 23 August, kol. Best reported that apart for the purchase of eight sets of bomb racks (Note 5), NOTHING had been done to prepare for the conversion. Fokker said it would take up to one year, depending on aircraft type, to have the KLM aircraft converted. Kol. Best considered the F.VIIb/3mM and the single Koolhoven FK.48 unfit for military use though usable as a trainer, transport, and ambulance. He divided the other possible types into 3 groups:

1. F.VIII, F.IX, F.XII, F.XVIII, and F.XX.
2. F.22 and F.36.
3. Douglas DC-2.

For all of these aircraft, the passenger accommodations had to be removed and the airframe locally strengthened, hatches and gun positions had to be installed, wiring and military equipment fitted, etc. In addition, each group needed a different approach.

Group 1: These aircraft were similar in construction to the F.VIIa/3m and required only small modifications. It was quite easy to fit an armament consisting of one fixed and two flexible machineguns. The available bomb racks could be installed on all aircraft of this group. At the time, this group consisted of 15 aircraft, 14 of which were usable. The 15th was the twin-engine F.VIII with a different engine type and this was earmarked for the Flying School.

Group 2: These large four-engine aircraft were in a class of their own. The fuselage nose had to be removed and replaced by one with a gun turret. Aft of the wing, two gun turrets and a gun in a bottom hatch had to be fitted. Ground clearance did not allow bomb racks under the fuselage, but these could be fitted in the luggage compartments in the wing and also carried under the wing.

Group 3: The all-metal DC-2 had the best performance and load-carrying capacity. Due to the monocoque construction, the fuselage needed considerable strengthening around each new hatch and gun position. The wing construction made it impossible to carry the bombs at the centre of gravity and, therefore, four bomb bays were projected: two in front and two aft of the wing. The bombs would be carried vertically. Wing racks were also possible. Retractable upper and bottom turrets would be installed, and a fixed nose cannon was possible. (Note 6)

The time required for the conversion was also calculated. Production of parts would take about four months for groups 2 and 3, and considerable less for group 1. Actual conversion of the F.22 and F.36 would take 6 weeks; for the other types 4 weeks. This would be followed by a test period of 1½-2 months. Fokker considered conversion possible in four weeks, provided all preparations (design and production) were completed. Kol. Best considered that it would take a full year before a plane could be converted. Since the costs of re-conversion to airliners also had to be taken into account, Kol. Best concluded that

conversion of KLM aircraft to bombers was now impractical, not to say useless. In case of mobilization, the LVA needed to have bombers available at once. He did see some possibilities of obtaining some of these airliners for second-line use. Kol. Best argued that, in case of war, the LVA had to strike at once and in force. Holland had to have sufficient bombers of its own available in peacetime to react at once to an attack. It would be bad for the populations' morale to undergo bombings without striking similar blows to the enemy. What kol. Best and gen. Reijnders may have thought, but did not mention, was that with the current situation, a war would be over long before the converted airliners were available. The CGS considered that the LVA needed at least two 9-plane BomVAs available at all times. This provided the arguments needed for the purchase of bombers and was a factor in the decision to order the Fokker T.5.

The new plans for a wartime organization, drawn up by the IML from 1936 until 1938, included a 3-plane night BomVA with the F.22s and the F.36. This idea was dropped and, after offering them to the ML, KLM sold the aircraft to England; the RAF later used them as flying classroom.

The CGS (Chef Generale Staf), Lt.Gen. Reijnders (Note 7), reported on 5 November 1935 to the MoD. He supported kol. Best's conclusions and added some remarks of his own. The CGS considered requiring KLM, at government cost, to include modifications to future aircraft to make them easily convertible for military use. KLM was not interested. It would still take several weeks before these aircraft would be operational. In addition, to prepare for the conversion, the purchase of at least one aircraft of each type would be required.

Frits Gerdessen (SAFCH #12), The Netherlands.

## Notes

1. The famous F.VIIb/3m airliner, with a larger wing (there was no single-engine F.VIIb), appeared in 1926. From 1927 on, Fokker received large orders for the type. The F.VIIb/3mM was the bomber version of the F.VIIb/3m. Apart from bomb racks, these military versions usually had one fixed synchronized machinegun in the nose, another in a dorsal position on a Scarff ring, and a third mounted in a ventral hatch. The performance of these military versions was about the same as their civilian counterparts. The F.VIIb/3mM bomber was never built by Fokker, but Plage & Laskiewicz in Poland and Avia in Czechoslovakia built the type under license. Loring, in Spain, built three for the Aviacion Militar. Several civil F.VIIb/3m ended up in the military, e.g. two in the Netherlands East Indies and several in Belgium and Spain.

2. Fokker used separate series for wings and fuselage. The rompnummer (fuselage nr.) is the c/n. The vleugelnummers (wing nrs) were different from the rompnummers.

3. By 1934, the LVA decided that a special aircraft was required for mapping duties. Fokker offered the F.XIV PH-AEW, a one-off trimotor cargo aircraft but the LVA considered this type uneconomical. Therefore, Koolhoven was asked to construct a suitable type that emerged late in 1935 as the twin-engine FK.49. It even had a dark room. The

FK.49 served with the PVA and was later also used as a transport and a twin-engine trainer. The LVA might have had another multi-engine aircraft, the Pander S.4 Postjager. This trimotor plane was to be converted into a fast reconnaissance aircraft after returning from the Melbourne Race. But it was lost at Allahabad, India, and the funds were put to better use to order one more C.X.

4. The logbook of Lt. Lutz mentions all these flights and the 2-V-2 personnel (sgts and cpls) who accompanied him. One of the soldiers who flew with Lutz told the author of this article that on several flights an NCO let a soldier (conscript) take his place. This change was not recorded in the logbook so that the NCO could cash in his flight pay, f 2,88/hr. In this case, regular/professional ML personnel (sgts.) misused their position to earn some extra money. The mobilized personnel of the ML consisted mainly of reserve officers, NCOs, and conscripts. The conscripts had to serve one year of basic training and practical service at Soesterberg. Thereafter, they could be mobilized. The LVA/ML had three inputs a year of about 50 conscripts each, some of whom became sgts.

5. Two sets of bomb racks had been purchased for the F.XII and six sets for the other types. These bomb racks were used after all. The production of racks for the Fokker T.5 had been much delayed, and

by the time Holland was invaded in May 1940 only two T.5 had modern racks capable of carrying 200 and 300 kg bombs. Thus, the available racks had to be used as an interim measure. Yet there were not enough racks to arm all 16 T.5's. As a result, most T.5 could only carry 50 and 100 kg bombs. On patrols they usually carried a total of 400 kg of bombs. (Consult the author's T.5 Profile to learn more about the bomb racks for the T.5.)

6. At the same time the C.LVA was studying this matter, Fokker had worked out how the DC-2 could be converted into a bomber. This was done on request of the Kriegstechnische Abteilung of the Eidgenössisches Militärdepartement of the Swiss Flugwaffe. The Swiss were interested in the military use of Swissair's DC-2s. Fokker responded to the Swiss on 26 June 1935 and he also sent his report with drawings, performance data, etc. to kol. Best, who in turn informed the CGS. Fokker had calculated the cost of conversion of one Swiss DC-2 made available at Schiphol: Design and calculation, etc. f 23.000, conversion f 29.500, and flight and systems tests f 16.000. Fokker could produce and fit retractable turrets for f 18.000. This amounted to f 88.500 per DC-2. The unit price would be reduced if more than one aircraft were to be converted. The price was without armament. The Swiss considered the DC-2 conversion impractical and too expensive

and took no further action. Yet they seem to have ordered Swissair to require that the purchase of new aircraft have modifications to enable an eventual speedy conversion for military use. That was discussed with Koolhoven for the purchase of the FK.50 by Alpar. (Koolhoven designed a bomber variant of the FK.50 for Spain, but this was cancelled at the start of the Civil War. However, the Republican government ordered 4, but that order was changed to 4 FK.51).

7. In peacetime the CGS was the highest military authority, as Lt.gen. CGS Lt.gen. I.H. Reijnders automatically became OLZ (Opperbevelhebber Land-en Zeemacht, Commander in Chief of Army and Navy and a 4-star General) when Holland mobilised in 1939 (it was the same with Gen. C.J. Snijders in WW1). He disagreed with the MoD and government about the defense arrangements and tactics and complained he was too restricted. In addition, the new MoD (lt.col. A.Q.H. Dijkhoorn) had been a CGS officer, thus subordinated to Lt.gen. Reijnders. Reijnders could not swallow that a former subordinate now was his superior. In February 1940 Gen. Reijnders resigned and was replaced by (already retired) Gen. H.G. Winkelman. Winkelman got more a free hand than Reijnders and was much more flexible (and much easier to go on with).

### **Fokker Military F.VII/3m Specifications**

#### **F.VIIa/3mM**

Three Armstrong Siddeley Lynx 218 hp. Span 19.30 m, length 14.80 m, height 3.90 m, wing area 58.5 m<sup>2</sup>. Top speed 180 km/h, cruising speed 140 km/h, climb to 3000 m 26.4 min. Empty weight 2400 kg, total weight 3600 kg (crew and equipment 600 kg, fuel and oil 600 kg). Reference: LVA data sheet 1938. Armament: As far as known, the LVA's F.VIIa/3mM had one fixed gun and one on a Scarff ring in a dorsal position.

#### **F.VIIb/3mM**

Projected as bomber, troop transport, and colonial policing aircraft to be powered by 3 Wright Whirlwind 420 hp engines. Span 21.7, length 14.5, height 3.9 m, wing area 67.5 m<sup>2</sup>. Crew: 4. Loaded weight 5300 kg [lighting, radio, etc. 200 kg; crew (4) 320 kg, fuel and oil for 650 km 700 kg, military load 880 kg]. Top speed 240 km/h, cruising speed

200 km/h. Range of action 650 km. Climb to 5000 m in 29 min. Absolute ceiling 6000 m, practical ceiling 5500 m. Armament: 2 fixed MG low in the nose, one or two dorsal guns on Scarff mounts, 2 MG in side windows (for passengers?), and one MG in bottom hatch. Bombs in forward part of passenger cabin: Fokker bomb racks 3 x 100 or 6 x 50 kg.

Later, the performance of the F.VIIb/3mM was recalculated with 3 Wright J6, R975, 320 hp. Speeds 210/180 km/h. Dimensions the same. Empty weight 3150 kg, loaded weight 2150 kg (crew 320, armament 470 kg, equipment 320 kg, fuel and oil 1040 kg). As for equipment and armament for the type as a bomber, a data sheet dated 8 Sept. 1930 mentions: 350 kg: radio 60 kg, 3 MG 50 kg, 1500 rounds 65 kg, lighting 60 kg, bomb-racks 100 kg, miscellaneous 15 kg. Bomb load e.g. 4 x 200 = 800 kg, 18 x 50 = 900 kg.

## Fokker Type Numbers

In Germany during WW1, Fokker type numbers were according to the orders of the German Fliegertruppe. First a letter indicating the type: C = armed two seat biplane and D = armed single-seat biplane. This was followed by a Roman numeral, e.g. D.VI - the 6th D-type ordered from Fokker. Between letter and number was a space. NO hyphen. Instead of a space a dot can be used. The advantage when using a word processor is that the type designation will not be "broken" at the end of a line. That can also be prevented with a HARD space.

When Fokker set up in Holland, the type designation system was continued with the addition of F which by late 1918 indicated "Fernaufklärer" (long range recon plane).

At the end of WW.1, the Fokker F.I was not finished and it was converted to a passenger aircraft, but was later abandoned. Instead the F.II was built. Thus, Fokker F types became airliners. Other new type letters:

B	flying boat
CC	cruiser
DC	two-seat fighter
FG	glider
G	heavy fighter
S	trainer
T	bomber/torpedo

In the early twenties, the type designations were sometimes confused. Both Arabic and Roman numerals and various type letters were used and some projects just

had a name. After some years, it was decided to use Roman numerals, but in the late thirties again Arabic numerals appeared in documents, drawings, and publications. The reason was that the Roman numerals became quite long, e.g. D.XVII, F.XXII, F.XXXVI. These became D.17, F.22, F.36, C.10, D.21, D.23, etc.

The problem is where to make the change. We may e.g. use Arabic numerals for B.5, C.5, D.16, F.7, S.4, and T.4.

In case a type was projected as both land- and seaplane, the suffix L(and) or W(ater) was added. Military versions of civil aircraft had the suffix M.

It must be stressed that German WW.1 types must NEVER be written with Arabic numerals. However, this does not apply to the factory type numbers, e.g. Fokker used the M-series M.1-M.22 and the V-series V.1-V.45.

In the twenties Fokker did not use factory type nrs. A project got a type number, and when it was abandoned, that number would be reused. Thus there were e.g. 3 types C.VII.

From 1934, project numbers were introduced, starting with 101. This series continued well after WW2 in the 300's. Yet in the thirties several types, e.g. the S.9, had no project number.

Frits Gerdessen (SAFCH #12), Netherlands.

## National Markings and Colors of Dutch Military Aircraft

As early as December 1913, at least one Dutch military aircraft (Farman LA2, possibly also LA3) had orange roundels under the bottom wing. On 5 August 1914, order was given to have the orange roundel under both wings of biplanes. We can say that the private venture of Lt. van Heijst (LA2) was adopted. Later a fuselage roundel was introduced, as well as an orange rudder.

However, in the Netherlands East Indies, they were not satisfied with the orange marking because it resembled too much the Japanese meatball. Thus, in January 1920 a roundel with red, white, and blue sectors, and an orange centre was introduced. This marking, in six positions, was also adopted in Holland in July of 1921. In addition the rudder was painted red-white-blue.

At first, the roundel was painted on in all possible orientations. Therefore, in January of 1933, an order was issued. Red, white, and blue should be applied clockwise, in that order. The dividing line blue-red should be vertical on the fuselage and parallel to the centre line on the wings. Also the correct position and size of the marking was specified.

In 1938, discussions started about the visibility of the markings. A test was made with a red-white-blue-orange ring marking on a T.5 (860). This was not adopted. A smaller marking was also discussed. On 15 January 1939, the red-white-blue on the rudder(s) was dropped.

The shooting down of T.8W R-5 in September 1939 prompted the introduction of a new marking. The roundels on the C.7W were over-painted orange with a black border. This form was not to be adopted. On 23 September 1939, a new marking was ordered - an orange triangle, with a 10 cm black border, as large as possible halfway on the wings and on the fuselage. The rudder was to be painted orange with a 10 cm black border.

From 1920, the combat aircraft were generally painted dark olive green on the upper surfaces and pale blue on the undersides. Trainers were pale blue overall. In 1938, camouflage was introduced on the new combat aircraft: Fokker T.5, D.21, G.1, and Douglas DB-8A/3N. These aircraft had dark brown under surfaces.

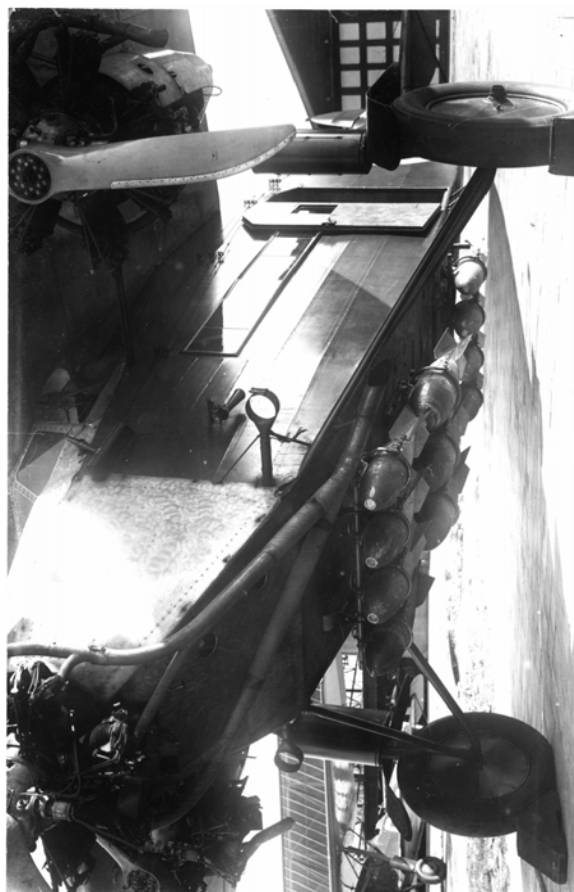
Frits Gerdessen (SAFCH #12), Netherlands.



# **Fokker F.VIIa/3mM in LVA Service** All photos from the collection of F. Gerdessen



**F.VIIa/3mM '801'; note bomb racks**



**'801' with full load of bombs**



**'801' during tests with the Nationaal Luchtvaart Laboratory**



**F.VIIa/3mM '802'**

**Fokker F.VIIa/3mM in LVA Service**  
All photos from the collection of F. Gerdessen



**Fokker F.VIIa/3mM '803' 10 July 1935**



**'802' in flight. Note absence of rudder stripes**



**'803' in flight. Note absence of rudder stripes**



**F.XVIII at Curacao, Dutch West Indies, with orange triangle insignia**

## Fokker Airliners that were Considered for Conversion to Bombers

All photos from the collection of F. Gerdessen



**F.VIII PH-AED**

**F.IX PH-AFK at Schiphol**



**F.XII PH-AFL at Waalhaven**



**F.XVIII PH-AIP at Schiphol**

## Fokker Airliners that were Considered for Conversion to Bombers

All photos from the collection of F. Gerdessen



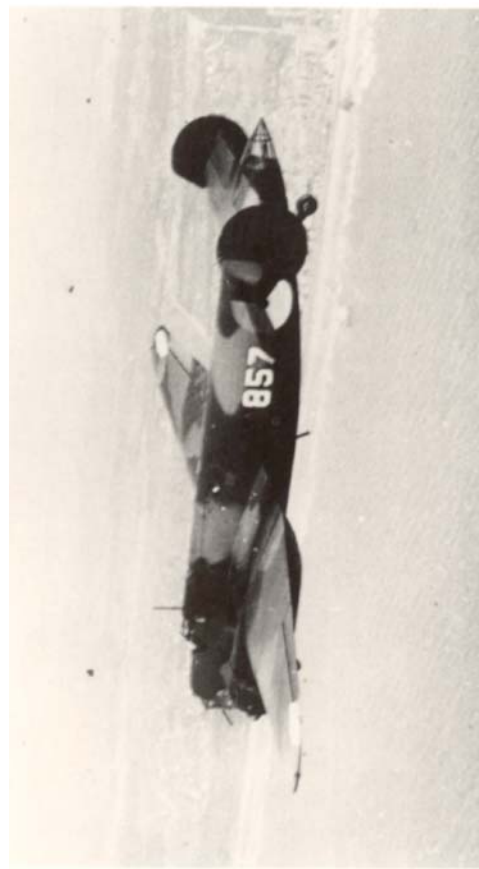
**F.XX PH-AIZ zt Schiphol**



**F.22 PH-AJR**



**F.36 and D.17 '209'**



**T.5 '857' over the beach at Schevebingen summer 1939 (Metzar)**



# The Korean People's Air Force

## in the Fatherland Liberation War

### Part Four: Regroup and Try Again

Douglas C. Dildy

#### Battling "Operation Chromate"

On the morning of September 15<sup>th</sup>, the first of six battalions of the USMC's 1<sup>st</sup> and 5<sup>th</sup> Marine Regiments came ashore at Wolmi-do Island, just off the port of Inchon, with the rest of them landing along the waterfront at Inchon that afternoon. The naval bombardment, air strikes, and the 1<sup>st</sup> Marines destroyed the two 76.2mm artillery batteries of the KPA's 918<sup>th</sup> Coastal Artillery Regiment and drove the 2,000-man 226<sup>th</sup> Naval Infantry Regiment from their prepared defenses, this unit's various disorganized elements retiring towards Kimpo AB with 25% casualties.

The next day the North Koreans began to organize a defense centered on the holding the airfield against the approaching Marines. As the senior North Korean officer west of the Han River, the KPAF's Gen. Wang established the 1<sup>st</sup> Air Force Division, consisting of his own 877<sup>th</sup> AFU, under Major (Maj.) Kung Chan-So; the 107<sup>th</sup> Security Regiment, led by Colonel (Col.) Han Choi-Han; and the survivors of the 226<sup>th</sup> Naval Infantry Regiment – a force totaling about 3,000 men, but these were widely dispersed in small groups with little or no communication between them, or with Wang's HQ on the airfield.

Early on September 17<sup>th</sup>, Wang launched a handful of sorties with the few combat aircraft that remained operational at Kimpo AB. These include two to four Il-10s and (apparently) a single Yak-9P. Just before dawn, the *Shturmoviki* launched the first two of four anti-shipping sorties. At 0555hrs, two of these located the line of cruisers anchored in the channel off Wolmi-do Island to provide naval gunfire support for the Marines ashore. After flying from north to south down the line of anchored ships at 1,000ft (330m), the leading Il-10 turned and made a shallow diving attack on the USS *Rochester*, the flagship of the "Operation Chromate's" naval commander, Vice Admiral Arthur D. Struble.

Two bombs were dropped, one of them glancing off the cruiser's aircraft handling crane on the stern, both exploding in the water. The second attacker (reported by nearby HMS *Jamaica* to be a Yak-9)

also dropped two bombs, both falling wide. The two KPAF aircraft then turned and strafed the HMS *Jamaica* with 20mm cannons and were greeted with AA fire. One RN sailor was killed and another two wounded but the second attacker was shot down, the aircraft banking left and flashing across the bow to impact the water about 30yds/m beyond the ship.

Meanwhile, the advancing 5<sup>th</sup> Marines approached Kimpo, investing the airfield on three sides. The situation was so dire that Col. Han abandoned his 107<sup>th</sup> Security Regiment and fled across the river to Seoul. During the early morning hours of September 18<sup>th</sup> – from 0300hrs through dawn – the 877<sup>th</sup> AFU launched four sporadic uncoordinated counter attacks against the 5<sup>th</sup> Marines. Attacking piecemeal and without supporting artillery or heavy weapons, the futile charges were annihilated, with 395 KPAF troops – including Maj. Kung – being killed. Gen. Wang and his few surviving air force members evacuated across the Han River, leaving Kimpo AB to the US Marines who reported it secured at 1000hrs.

On the air base the wreckage of at least six Il-10s and four Yak-9Ps were discovered. In the burned out hangar were captured – damaged but repairable – two Il-10s (number "44" and "55") and one Yak-9P. These three "trophies" were dismantled and shipped to the USA where they were repaired, examined and technically evaluated by the Cornell University's (formerly Curtiss Aircraft Corp's) Aeronautics Laboratory, then sent to Wright-Patterson AFB, Ohio, for flying tests and operational exploitation.

#### One Last Gasp

When counter-attacking UN forces crossed the 38<sup>th</sup> Parallel into North Korea on October 7<sup>th</sup>, 1950 – and showed no signs of halting until the DPRK was utterly destroyed – the leadership of the newly formed People's Republic of China (PRC) began organizing a massive military "intervention", sending the 13<sup>th</sup> Army Group (initially twelve infantry and three artillery divisions) to the Northeast Military Region. Euphemistically called the "Chinese People's

Volunteer Army” (CPVA), its commanders were critically concerned about their total lack of air cover.

This was because, at this time, the People’s Liberation Army Air Force (PLAAF) consisted only of one mixed aviation brigade of 155 Soviet-built fighters, bombers and assault aircraft based near Nanjing (Note 1) and, at Beijing, an *ad hoc* unit of approximately 30 Lavochkin La-9 fighters about to begin conversion to MiG-9 jets (Note 2). All of these were undergoing further training with Soviet units in order to expand them into air divisions, so they were not available or even prepared for combat duties.

Consequently the PRC’s Chairman Mao Zedong appealed to Stalin for further assistance. At this time the USSR had two fighter aviation divisions (FAD) in China – the 50<sup>th</sup> FAD and 151<sup>st</sup> Guards FAD (GFAD) – totaling approximately 200 MiG-15 jet fighters. The 50<sup>th</sup> FAD was formed for the air defense of the Liaodong Peninsula (site of the Imperial Russian Port Arthur, now Dalian) and the 151<sup>st</sup> GFAD was stationed at Anshan and Shenyang to train the PLAAF’s 3<sup>rd</sup> and 4<sup>th</sup> FADs, both of which began forming in October. (Note 3)

However, Stalin was afraid to confront the Americans directly and only agreed to protect strategic Chinese assets – airfields, bridges and hydroelectric power plants on the Yalu River – and important rail lines into North Korea. On October 19<sup>th</sup> – the same day that UN forces entered Pyongyang – Mao Zedong ordered the now heavily reinforced (to 30 divisions) CPVA to cross the Yalu into North Korea and prepare for counter-offensive operations, with or without Soviet air support. In fact the only air cover available was the KPAF’s reconstituted 56<sup>th</sup> “Guards Taejon” FAR. (Note 4)

Since the end of August, Kim Il-Sung had taken Stalin up on his offer to supply additional fighter aircraft to the Korean air force. (Note 5) By the end of October, Stalin’s military envoy to Mao Zedong, General S. E. Zakharov, informed his chief that the KPAF now had two dozen operational Yak-9Ps, with 26 qualified pilots, deployed to Antung (now Dandong) a Chinese border city near the mouth of the Yalu River. This city was connected by two strategic road and railway bridges to Sinuiju, North Korea, where Kim Il-Sung had withdrawn his government and built a modern air base, complete with protected aircraft revetments. The Antung-Sinuiju bridges were two of only six spanning the Yalu and were critical

for funneling CPVA forces and their supplies into North Korea. The nearby air base was built to protect them.

The KPAF deployed 22 Yak-9Ps across the Yalu to Sinuiju airfield to resume combat operations on November 1<sup>st</sup>. While the 151<sup>st</sup> GFAD launched two four-ships of MiG-15s each from Anshan and Shenyang (28<sup>th</sup> and 72<sup>nd</sup> Guards Fighter Aviation Regiments [GFAR]) to cover the Antung-Sinuiju bridges, the KPAF launched two four-ships of Yak-9Ps from Sinuiju to attack American warplanes bombing and strafing CPVA and KPA units near Ansui.

About 15 miles south of Sinuiju, near Yangsi, one KPAF formation found USAF B-26s (730<sup>th</sup> B[L]S)/452<sup>nd</sup> B[L]W), being controlled by a NAA T-6G “Mosquito” FAC (6147<sup>th</sup> Tactical Air Control Squadron). The Yaks split into pairs and attacked both. Invader gunners drove off one pair, claiming one Yak-9 shot down, while the nimble Texan dodged its attackers, calling for help from nearby Mustangs. By the time the fighters (67<sup>th</sup> FBS/18<sup>th</sup> FBW) arrived the enemy had vanished and the FAC directed them to attack a convoy of ox carts moving north.

About this time the second formation of Yak-9Ps arrived and attacked the Mustangs, splitting into pairs to do so. While they had the element of surprise, their poor gunnery skills caused their first pass to miss their targets and in the rather involved maneuvering that followed two of them fell to the aggressive, hard-maneuvering and sure-shot Mustang pilots, one of the KPAF pilots bailing out. While the Koreans admitted the loss of these two Yaks the survivors claimed to have shot down two B-29s [*sic*] and a Mustang.

Meanwhile, back at Sinuiju, an RF-80A pilot (8<sup>th</sup> TRS[PJ]) reported “15 Yaks parked in revetments” and Fifth AF immediately dispatched an attack by a dozen Shooting Stars (51<sup>st</sup> FIW). The target was extremely challenging because the airfield paralleled the Yalu, only a short distance from the river and the revetments faced north, forcing the Americans to attack from that direction. Forbidden to fly into PRC airspace the Shooting Stars were squeezed between their target and the river and had to roll-in over the river exposing their bellies to Chinese AAA guns lining the northern shore. Consequently one F-80C was lost, its pilot killed, and success was limited. Soviet sources report “one Yak-9 was burned and three were put out of action, but it is [*sic*] possible to

restore them”. Finding themselves still vulnerable to enemy airfield attacks, Koreans withdrew the 16 surviving fighters to Antung, back inside the safety of their “Manchurian sanctuary”.

The next day the “Guards Taejon” tried again, sending a four-ship formation against the Mustangs (12<sup>th</sup> and 67<sup>th</sup> FBS/18<sup>th</sup> FBW) bombing, strafing and rocketing Communist troops just south of Sinuiju. The KPAF pilots were reported to be much more aggressive and skillful in air-to-air maneuvering, but nevertheless lost two of their number to the more experienced Mustang pilots.

Finally, on the 6<sup>th</sup> six Yak-9Ps took off from Antung and headed east, climbing for altitude to “bounce” three F-51Ds on an armed reconnaissance northeast of Sinuiju. The Mustang pilots saw them

and turned into their attack and in another free-wheeling engagement another pair of Yaks was shot down, one KPAF pilot bailing out successfully.

Having lost six Yak-9Ps in aerial combat with USAF Mustangs – and with no American aircraft shot down by them – the 56<sup>th</sup> “Guards Taejon” FAR was once again withdrawn from combat. Coupled with the FEAF’s increased bombing of the Yalu bridges, the Soviets were urged to provide increased air cover, Stalin’s acquiescence on this point resulting in committing two more MiG-15 divisions (303<sup>rd</sup> and 324<sup>th</sup> FADs) to the Korean War, thus initiating of the two-and-a-half year long aerial duel in what became known as “MiG Alley”.

Doug Dildy (SAFCH #844), USA.

## NOTES

1. The PLAAF’s 4<sup>th</sup> Mixed Aviation Brigade completed initial type training under the Soviet 106<sup>th</sup> FAD in June 1950 and consisted of (one regiment each of) 38 MiG-15 jets, 39 La-11 prop fighters, 10 Tu-2 bombers and 25 Il-10s (plus 14 Yak-11 trainers). Operational training continued for another three months and it was not declared combat ready until October 19 1950.

2. Originally formed in July 1949 to defend Beijing from Koumintang (KMT or “Nationalist”) bombing attacks using 30 captured KMT aircraft, this *ad hoc* “combat squadron” was re-equipped with a similar number of La-9s in August 1950. In mid-November 1950, the Soviet 328<sup>th</sup> FAD arrived to train the unit on the straight-wing jet-powered MiG-9, expanding the unit into the 14<sup>th</sup> FAD in doing so.

3. The 50<sup>th</sup> IAD was originally the 106<sup>th</sup> IAD that had trained the PLAAF’s 4<sup>th</sup> Combined Air Brigade at Shanghai during March-June 1951. That mission complete, in August it was reformed under its new designation at Xiansilipu on the Liaodong Peninsula to guard against possible USN and RN/FAA air attacks. Also in August the 151<sup>st</sup> GIAD began arriving at Anshan airfield near Shenyang to begin training the PLAAF’s 3<sup>rd</sup> and 4<sup>th</sup> FADs on the MiG-15 in late October. As the PVA began crossing the Yalu into Korea, it was ordered to provide air cover “for the troops of the PLA’s 13<sup>th</sup> Army Group... [but] will not fly across the state border with the Korean People’s Democratic Republic.”

4. The resurrection of the 56<sup>th</sup> GFAR was most probably accomplished through the Soviet 147<sup>th</sup> FAD’s 84<sup>th</sup> FAR which was alerted for movement from its base near Voroshilov, Primorye Region, on September 21<sup>st</sup>, and was ordered to deploy 40 Yak-9Ps via Yanji and Antung to

defend Pyongyang against UN air forces. However, two days later this unit was substituted with the 32<sup>nd</sup> FAD’s 304<sup>th</sup> FAR 40 La-9s from Spassk airfield, Primorye, with a scheduled arrival date of October 3<sup>rd</sup>. This unit’s ground echelon – maintenance technicians, air base personnel, radio technicians and four radar units, AAA battalion (16 guns), fuel stocks and munitions for 15 missions – were dispatched on September 25<sup>th</sup>, arriving five days later. However, the UN advances across the 38<sup>th</sup> Parallel threatened the deployment and on October 7<sup>th</sup> they were ordered “evacuated from the territory of Korea”. The 304<sup>th</sup> did not return to the 32<sup>nd</sup> FAD (which converted to the MiG-15) but apparently retired to Jilin, China, became part of the 297<sup>th</sup> FAD and began training the PLAAF’s 9<sup>th</sup> FAD in December, 1950. Because of its quick replacement on the abortive Pyongyang deployment, it is believed that the 84<sup>th</sup> FAR provided Yak-9P training, and then the aircraft themselves, to the KPAF’s 56<sup>th</sup> GFAR.

5. At this point only Yak-9Ps were provided. By this time the KPAF’s 20 surviving Il-10s (see Part 3 of this series) were apparently only suited for training. These, along with a few Yak-18s, were moved to Fen Cheng, about 28 miles west of Antung/Dandong where training continued, bringing the total qualified Il-10 pilots to 25 by the end of October. However, in his communication with Stalin, Gen. S. E. Zakharov reported “but up to now there are no planes for them.” This was accompanied by a formal request from Colonel A. Petrachev, the Soviet air force advisor to the KPAF, for “25 Il-10 planes”.

**Captions for the photographs that appear on page 143 can be found at the bottom of page 142.**

**Table 1**  
**USAF and ROKAF Aircraft Lost to Actions of the Korean People's Air Force in 1950**

Date	Service	Type	Serial No.	Unit	Location	Remarks
25 June	ROKAF	7 L-4/T-6		Training Unit	Kimpo AB	Strafed by Yak-9Ps
25 June	USAF	C-54D	Unknown	MATS	Kimpo AB	Strafed by Yak-9Ps
28 June	USAF	B-26B	44-34379	13 <sup>th</sup> BS(L)/3 <sup>rd</sup> BG	Suwon AB	Strafed by Yak-9Ps
28 June	USAF	F-82G	46-364	68 <sup>th</sup> F(AW)S	Suwon AB	Destroyed during evacuation Strafed by Yak-9Ps
28 June	USAF	C-54D	42-72648	22 <sup>nd</sup> TCS/374 <sup>th</sup> TCW	Suwon AB	Destroyed during evacuation Strafed by Yak-9Ps
29 June	USAF	C-54D	Unknown	6 <sup>th</sup> TCS/374 <sup>th</sup> TCW	Suwon AB	Bombed by Il-10s
12 July	USAF	B-29	-69866	28 <sup>th</sup> BS/19 <sup>th</sup> BW	near Seoul	Shot down by Yak-9Ps
12 July	USA	L-4	Unknown	US Army	near Taejon	Shot down by Yak-9Ps
13 July	USA	L-5	Unknown	US Army	near Taejon	Shot down by Yak-9Ps
14 July	USAF	B-26B	44-34263	13 <sup>th</sup> BS(L)/3 <sup>rd</sup> BG	near Taejon	Damaged by Yak-9Ps; Landed at Taejon airfield; Destroyed during evacuation
19 July	USAF	F-80C	49-698	36 <sup>th</sup> FBS/8 <sup>th</sup> FBG	near Taejon	Damaged by Yak-9Ps; Crashed during landing attempt at Taejon airfield; pilot killed

**Table 2**  
**USAF and USN Aerial Victory Claims against Korean People's Air Force Aircraft in 1950**

Date	Type	Claimed as	US Unit	Type	Pilot Name	Remarks
27 June	Yak-11	Yak-7U	F(AW)S	F-82G	1Lt William G. Hudson	F-82G S/N 46-383
27 June	Yak-9P	La-7	68 <sup>th</sup> F(AW)S	F-82G	1Lt Charles B. Moran	
27 June	Yak-9P	La-7	339 <sup>th</sup> F(AW)S	F-82G	Maj James W. Little	
27 June	2 x Il-10	2x Il-10	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt Robert E. Wayne	
27 June	Il-10	Il-10	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	Capt Raymond E. Schillereff	
27 June	Il-10	Il-10	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt Robert H. Dewald	
29 June	Il-10	La-7	9 <sup>th</sup> FBS/49 <sup>th</sup> FBW	F-80C	1Lt William T. Norris	Note 1
29 June	Il-10	Il-10	80 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt Roy W. Marsh	
29 June	2 x Il-10	2 x Il-10	80 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-51D	2Lt Orrin R. Fox	Note 2
29 June	Il-10	La-7	80 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-51D	1Lt Harry T. Sandlin	Note 2
29 June	Il-10	Il-10	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-51D	1Lt Richard J. Burns	Note 2
30 June	Yak-9P	Yak-9	36 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt Charles A. Wurster	
30 June	Yak-9P	Yak-9	36 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt John B. Thomas	
3 July	Yak-9P	Yak-9	VF-51/CAG 5	F9F-3	Lt (jg) Leonard H. Plog	BuNo. 123071
3 July	Yak-9P	Yak-9	VF-51/CAG 5	F9F-3	Ens Eldon W. Brown, Jr.	BuNo. 123026
15 July	Yak-9P	Yak-9	39 <sup>th</sup> FIS/51 <sup>st</sup> FIW	F-80C	1Lt Robert A. Coffin	
17 July	Yak-9P	Yak-9	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	Capt Francis B. Clark	
19 July	Yak-9P	Yak-9	36 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt Robert D. McKee	
19 July	Yak-9P	Yak-9	36 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt Charles A. Wurster	
19 July	Yak-9P	Yak-9	36 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	2Lt Elwood A. Kees	
20 July	Yak-9P	Yak-9	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	Capt Robert L. Lee	
20 July	Yak-9P	Yak-9	35 <sup>th</sup> FBS/8 <sup>th</sup> FBW	F-80C	1Lt David H. Goodenough	
1 November	Yak-9P	Yak-3	67 <sup>th</sup> FBS/18 <sup>th</sup> FBW	F-51D	Capt Alma R. Flake	
1 November	Yak-9P	Yak-3	67 <sup>th</sup> FBS/18 <sup>th</sup> FBW	F-51D	Capt Robert D. Thresher	
2 November	Yak-9P	Yak-9	67 <sup>th</sup> FBS/18 <sup>th</sup> FBW	F-51D	Capt Alma R. Flake	
2 November	Yak-9P	Yak-9	12 <sup>th</sup> FBS/18 <sup>th</sup> FBW	F-51D	1Lt James J. Glessner, Jr.	
6 November	Yak-9P	Yak-9	67 <sup>th</sup> FBS/18 <sup>th</sup> FBW	F-51D	Capt Howard I. Price	
6 November	Yak-9P	Yak-9	67 <sup>th</sup> FBS/18 <sup>th</sup> FBW	F-51D	1Lt Henry S. Reynolds	

1. This victory credit was not awarded because Lt Norris was one of four pilots scoring hits on the target and FFAF policy precluded "dividing credit among more than two persons". Additionally there were no La-7s in the KPAF inventory, so this was either a Yak-9P or an Il-10. Since another member of this formation shot down was an Il-10, this aircraft was most probably of the same type.
2. While described in Fuller (pg 31) as "Yaks", the USAF Korean War Aerial Victory Credits has always listed the victims as three Il-10s and one La-7. Since there were no La-7s in the KPAF inventory, this was either a Yak-9P or an Il-10. Because other members of this formation shot down were Il-10s, this aircraft was most probably that same type.

# The MiG-9 in PLAAF Service

“We consider it absolutely necessary now [for you] to start moving... to the front from central and southern China five or six divisions of MiG-9s, which operate very effectively against bombers.” This was the message from Soviet Premier Josef Stalin to PRC Chairman Mao Zedong on 13 June, 1951. At this time the Soviets were providing air cover for the crucial bridges spanning the Yalu River with two divisions (303<sup>rd</sup> and 324<sup>th</sup> *Istrebitelnaya Aviatsionnaya Divisii* [Fighter Aviation Divisions] or IADs) of MiG-15s but their “tour of duty” would be completed in six months and Stalin wanted the PLAAF to assume this role.

During the winter of 1950/51, the USSR had provided 376 MiG-9s (of 593 single-seat production examples built) – in the form of six *Voennovozdushnye Sily* (“Military Air Forces” or V-VS, the Soviet Union’s tactical air force) fighter divisions – to China. These units were responsible for providing local air defence while spending six months training equivalent Chinese units: six 60-aircraft fighter aviation divisions (FADs) as listed in the table below.

First flown in April 1946, the MiG-9 was the USSR’s first operational jet-powered interceptor, powered by a pair of the 1,763lb thrust RD-20s (Soviet copies of BMW 003S *Sturm* axial-flow turbojet) beneath small, straight wings and conventional, all-metal empennage. Capable of 566mph (911km/h) top speed and a maximum altitude of 44,290ft (13,500m), it met the State’s specified flight performance criteria.

But its armament appeared to be an afterthought: two Nudelman-Suranov NS-23 (23mm) cannon mounted beneath the open nose intake and the Nudelman N-37 (37mm) cannon awkwardly embedded in the intake’s bifurcation “splitter plate.” All three weapons had their long barrels poking out

precariouly well ahead of the intake and when fired, gun gasses flowed directly into engines causing compressor stalls and flameouts.

Additionally, it had too little wing for its weight, resulting in poor manoeuvrability, and its RD-20s guzzled its small 429gal (1625ltr) fuel supply, tightly confining its combat radius. Consequently, the Chinese were not happy with the MiG-9, believing (rightly) that the Russians were “dumping” inferior, obsolescent fighters on them, while charging then full price!

So when Stalin wanted the PLAAF MiG-9 FADs (plus two or three new Chinese MiG-15 units) to relieve his elite, but exhausted, MiG-15 IADs, Mao replied that it would be better if the Russians retrained three of these units on the more advanced MiG-15 before sending them into battle. Consequently, upon completing MiG-9 training, the 6<sup>th</sup>, 12<sup>th</sup> and 14<sup>th</sup> FADs spent another six months upgrading to the much faster, swept-wing MiG-15.

The Russians maintained that with its short range, high performance, and heavy cannon armament the MiG-9 was an effective point defence interceptor and “bomber-destroyer,” convincing the Chinese to purchase a large number of (otherwise unusable) RD-20s to keep their other three MiG-9 FADs flying. These units were assigned to the PLAAF’s “Anti-Aircraft Defence System” before they too eventually converted to the MiG-15, circa 1953. At that point, the remaining MiG-9s were relegated to fighter training schools.

Douglas C. Dildy (SAFCH #844), USA.

## PLAAF MiG-9 Units 1951-53

Unit	Location	Established	Trained by	Which Arrived
6 <sup>th</sup> FAD	Anshan, Liaoning	November 1950	17 <sup>th</sup> Guards IAD	20 November
7 <sup>th</sup> FAD	Dongfeng, Jilin	December 1950	309 <sup>th</sup> IAD	10 December
12 <sup>th</sup> FAD	Xiaoshan Xian, Zhejiang	December 1950	144 <sup>th</sup> IAD	19 November
14 <sup>th</sup> FAD	Beijing	February 1951	328 <sup>th</sup> IAD	14 November
16 <sup>th</sup> FAD	Qingdao, Shandong	February 1951	65 <sup>th</sup> IAD	19 November
17 <sup>th</sup> FAD	Tangshan, Hebei	April 1951	20 <sup>th</sup> IAD	19 November



# Korean Takichawa Ki-9 Spruce

*“Having something in common“*

Frans Scheve

When World War Two ended in 1945, the Japanese IJAAF left a number of planes behind on the neighboring Korean Peninsula. Examples are: Ki-45 Oscar, Ki-54 Hickory, Ki-55 Ida, and the Ki-9 Spruce.

At this time, Korea was in a state of rebuilding and restoring its former everyday way of doing, trying to forget the century-old domination by Japan and its occupation during WW2. It was also using all available material to build-up new armed forces for defense, training, liaison, etc. The northern part of the peninsula was much influenced by the two neighboring communist countries. The southern part became more and more a refuge area for people looking for freedom, individualism, and peace of mind. At some point there was a difference of opinion of how to develop the country, which resulted in the Korean War (1950-1953). This finally ended up in the splitting of the peninsula into a north and a south territory – a situation we still have today.

One thing both Koreas had in common was their use of the Japanese Takichawa Ki-9 code name “Spruce”. An old nine-cylinder radial-engine biplane mostly used for training. The southern party used this type mainly for liaison and training. For the northern party it was a perfect aircraft to do some nighttime bombing runs down south - just enough to keep people up all night.

## Painting and Markings

A ‘Spruce’ of the northern party – as shown on one of the accompanying photos – had black Korean or Chinese characters on the side of its fuselage. When translated the text reads “School for National Aviation” or “National Air Force University”. (Asian characters often translate into different ‘personal’ explanations when translated into English language.) The plane does not seem to carry any national insignia and it seems to be painted medium-gray overall, but this is difficult to tell from the black & white image. (Perhaps this aircraft retained the former orange-yellow livery of its Japanese or Manchurian air force owners.)

The southern party painted their ‘Spruce’ in an overall

dark-green camouflage and used the ancient Korean *Taegeuk* symbol as their insignia a *Yin-Yang*- like symbol in the colors red and blue. This symbol or insignia is still used today on South Korean (ROK) military aircraft - albeit in a modernized form.\*

## Modelling

If you want to make a scale model of a Korean Takichawa Ki-9 “Spruce”, then the 1/48 model kit from the Japanese brand Nichimo is a very good option. There are many detailed injection molded plastic parts. For example, the cockpits have detailed seats and dashboards, separate side-wall frame tubing with equipment, and two sitting pilot figures, a third figure is supplied in standing position. The camouflage schemes and the decals are only for Japanese aircraft, even the color of the plastic – orange-yellow – has been adapted to this.

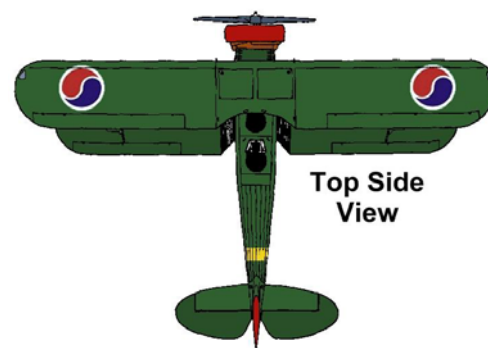
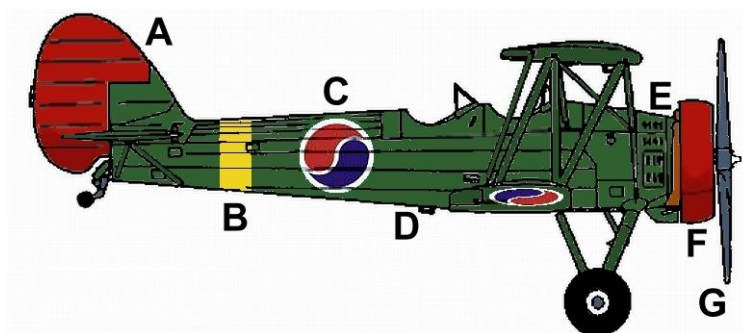
The Czech company RS-Models is a very good option in the 1/72 scale range. It includes nicely-formed injection molded plastic parts, a decal sheet with Japanese, Manchurian, and South Korean decals, and an etched metal sheet with small detailed parts that is pre-painted in color - even the tiniest dials on the instrument panels are displayed. RS-Models also issued a second “Spruce” kit. Basically this is the same kit as described above, but it has decals and four schemes for Japan, Thailand, Nanking AF, and Chinese AF, making it an excellent opportunity for modelers to build a Ki-9 of an exotic small air force.

\*The Korean red and blue *Taegeuk* symbol (*Eum-Yang*) finds its origin somewhere during the 7<sup>th</sup> century AD. It apparently even predates the Chinese black & white Taoist *Yin-Yang* symbol. The symbol represents the harmony between opposite forces; heaven and earth, light and dark, winter and summer, soft and hard, sun and moon. The color red represents Heaven, blue stands for Earth, and the white surrounding represents the traditional “white-clothed” Korean people.

Frans Scheve (SAFCH #890), the Netherlands.

## Explanation of notes on the drawings

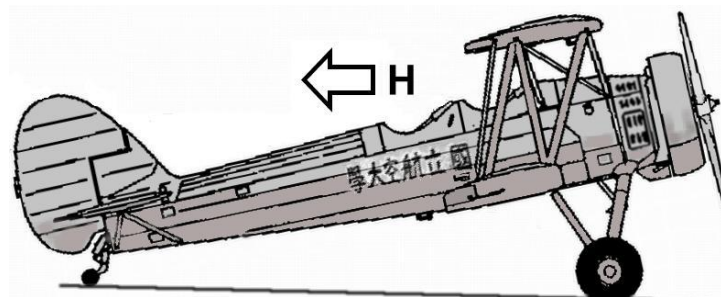
- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>A. The rudder is painted completely medium red.</li><li>B. Yellow tail band, denoting it to be of the Allied forces in Korea.</li><li>C. The “<i>Taegeuk</i>” symbol is in six positions.</li><li>D. Dark-green overall.</li><li>E. Rust-brown engine exhaust.</li><li>F. Medium-red engine cowling.</li></ul> | <ul style="list-style-type: none"><li>G. Dark-sea-gray propeller blades.</li><li>H. Black Chinese/Korean characters.</li><li>I. Blue and white US star and bar insignia.</li><li>J. The underside shows several sections where the original orange-yellow paint shows through.</li><li>K. A black white outlined capital ‘K’, denoting it to be of the ROKAF.</li></ul> |
|--|---|



Top Side View

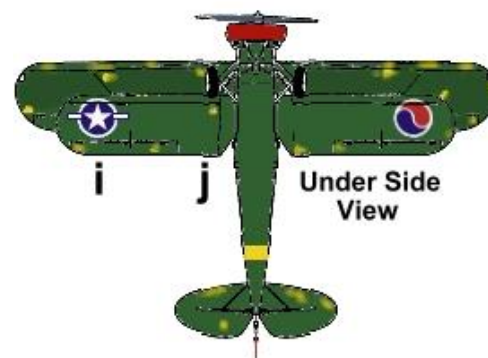
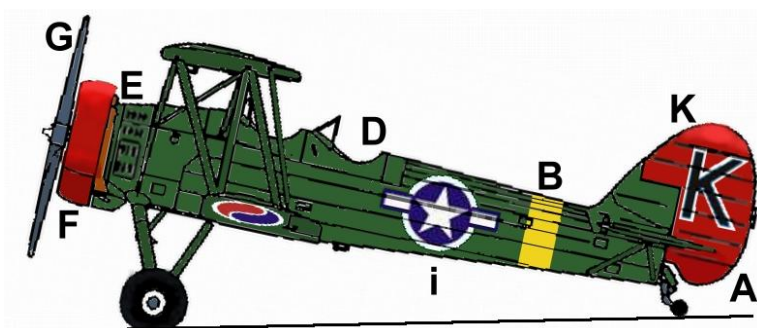
### A “Spruce” of the southern air force. (ROK).

This former Japanese Tachikawa Ki-9 was painted dark green overall. The national insignia – *Taegeuk* – was applied in six positions. The engine cowling and tail-rudder were painted red. ( See Pictures I & II and photo #13, SAFO 138, page 56).



### A “Spruce” of the northern air force (DPRK).

The northern forces used slow flying and hard to detect small ‘trainer’ aircraft – like this Ki-9 – for night time missions dropping small bombs. The purpose of this was to annoy Allied forces by keeping them out of their sleep, hence their nickname “Bedcheck Charlie”. ( See Picture III ).



Under Side View

### A “Spruce” of the combined US and southern (ROK) armed forces.

One Ki-9 had a very interesting mixed combination of ROKAF and USAF insignia. The yellow tail band and black white outlined ‘K’ denotes it to be of the Allied forces in Korea. ( See Picture IV ).



ROKAF servicemen posing in front of a Ki-9, of the Republic of Korea Air Force.



A US service man posing in front a Ki-9 wreck, probably a night bomber plane.



A lone ROKAF Tachikawa Ki-9 'Spruce' parked on the grass beside the runway.



A colourful photo of a Ki-9 biplane having Korean as well as US insignia.

All photos are from public domain internet pages



# Congolese Mustang Could-have-beens

Leif Hellström

Considering the many different air arms in the Congo in the 1960s, and the many and varied ways of aircraft procurement, it is not surprising that many proposed deals never came true. What is surprising, however, is that three of these concerned P-51 Mustangs in different forms.

## Katanga

The air force of Katanga, the Avikat, was the first one to consider obtaining Mustangs. Aero Enterprises in Elkhart, IN, USA, supposedly offered five Mustangs to Katanga in June 1961. These have been tentatively identified as N4143A/44-74445, N5444V/44-73751, N6300T/44-73163, N6318T/44-74602 and N8677E/ 44-74865. But this deal fell through.

In late September 1962, UN intelligence began hearing rumours of Mustangs being shipped from South Africa to Katanga. The reports were considered “not likely” and were in fact untrue, but may have been triggered by another, apparently more serious deal.

Arms dealer Pierre Laureys sold many things to Katanga. His last deal is said to have been for 14 Mustangs, at a cost of \$ 3 million. Katangan President Tshombe is said to have paid the first million on purchase and a second million on shipment, but the second check bounced. The Mustangs had reportedly been bought from Israel, with Portuguese assistance.

Information about the Mustang deal circulated among the Avikat mercenaries and the rumours were more persistent than usual, even if some pilots dismissed them as “only dreams.” The information was also quite specific and Avikat pilot Jimmy Hedges wrote in his diary on 17 December 1962 that 14 Mustangs were to be delivered in 28-30 days. By 14 January 1963, they were due at Lobito Bay harbour in seven days. Over the following couple of days Hedges wrote:

*I believe that Mustangs have been paid for too - but that may also be a rumour [...] Maybe – just maybe, we get our Mustangs & carry on from Henrique de Carvalho.*

By this time the Avikat was in exile. Avikat commander Jan Zumbach planned to base the Mustangs in northern Angola, perhaps at Henrique de Carvalho, with Portuguese permission. To return the favour, the aircraft would also be used against Angolan rebels based in Congo.

A surprise attack on the UN fighter base at Kamina was planned and this would likely have been one of the first missions for the Mustangs. The rumours of Katangese Mustangs did have the UN fighter pilots worried, since the

Mustang had good performance and enough endurance to wait until the UN jets had to land and then pick them off on final approach.

Hedges noted in his diary on 30 January 1963 that he had heard that several Mustangs were already unloaded at the Angolan capital Luanda and that one was being assembled by Portuguese Air Force technicians. That is the last mention of Mustangs and soon afterwards the Avikat mercenaries were dismissed and dispersed.

The story about Mustangs from Israel is quite interesting and fits rather well with the 1961 IDF/AF retirement date of its Mustangs. At that time some 30 Mustangs remained and many are unaccounted for. It is just possible, therefore, that some were in fact sold to Katanga, although most unlikely that any actually arrived in Angola. Some reports talk of four to six aircraft rather than 14, and that would seem a more reasonable number.

If the Mustangs had in fact been delivered, it is likely that they would have retained their IDF/AF camouflage on arrival, but with all Israeli markings removed. The Avikat was not known for any elaborate finishes and would probably have retained the existing paint job.

By this time the Avikat had long since stopped carrying national insignia on its aircraft and the markings would in all likelihood have been restricted to just a serial number with a “KA” prefix (the earlier KAT prefix had also been dropped), applied by hand on the fuselage sides and above the right wing, and maybe under the left wing, similar to the markings on the Avikat Harvards. The serial range KA-55 to -59 was vacant and might have been used for the Mustangs, if there were not too many of them. Had there indeed been 14 of them, KA-140 and up, or perhaps KA-135 and up, might have been used for the Mustangs.

## United Nations

It is only fitting that the Avikat’s main adversaries, the United Nations’ organization in the Congo (known as ONUC) would also have been considering the use of Mustangs.

By late 1962, the UN was desperately seeking aircraft to augment its fighter force in the Congo, which had been depleted with the departure of the Ethiopian F-86 Sabres and the Indian Canberras. UN Headquarters were searching high and low for possible alternatives and were also pressuring the USA to provide a fighter unit.

In mid December 1962, one of the suggestions put forward by UN Secretary-General U Thant was that the USA should provide six Sabres and four Mustangs to the ONUC fighter base at Kamina in Katanga. The aircraft

were to be serviced by US personnel but flown by Ethiopian and Swedish pilots. Most likely the Mustangs would have been flown by Swedes in this case, since the Ethiopians had no experience of similar aircraft.

In the event, of course, no Mustangs were provided and instead Sabres were obtained from various countries (see SAFO #132). The US Air Force no longer had Mustangs in service in 1962 but there were large numbers of surplus aircraft readily available in the USA. Had any been supplied, they would likely have been late model F-51Ds, still largely in WWII configuration but no doubt with upgraded radios.

Most of ONUC's combat aircraft had a natural metal finish, apart from some of the SAAB J 29s which were camouflage painted, and it is perhaps most likely that the Mustangs would also have remained natural metal.

But there is a chance that ONUC would have chosen to paint them overall white, retaining an Olive Drab or black anti-glare panel. They would most likely have carried "ONU" titles in blue or black in six positions. Those on the wings might have faced forward on one side and to the rear on the other, or they might all have faced forward. A blue or black serial would have been applied to the fin, possibly in the 600 range which was the first free ONUC number block. The typeface would be anybody's guess, but ONUC often used squarish lettering. A light blue and UN flag, probably placed on the fin, would no doubt have completed the picture.

### Congolese Air Force

The Congolese Air Force, the FAC, was wholly dependent on foreign support for the first several years of its existence. The CIA, in particular, was operating most of the FAC's combat aircraft, but CIA support was largely

withdrawn in 1967, and with it the B-26 Invaders provided "on loan" in 1964. The FAC T-6s were also retired from combat operations and all the FAC had left were T-28s. The Congolese were still woefully short of pilots but were still eager to obtain more and better aircraft.

The British air attaché reported in December 1967 that the Americans were trying to sell Mustangs to the Congolese, at \$ 90,000 a piece. These were no doubt Cavalier modified aircraft, either Cavalier F-51Ds or Cavalier Mustang IIs with additional underwing hardpoints. The Cavalier Mustang with wingtip tanks would in fact have been quite suitable to the Congo, where there was little opposition and where endurance and range were important. But the Congolese were set on obtaining jet aircraft and bought Macchi MB 326Gs instead.

Cavalier Mustangs procured through the US military were usually either overall light grey or had a USAF South-East Asia style camouflage pattern. The latter might have been used for any aircraft delivered to the Congo. National markings in dark blue, red and yellow were carried on the fuselage and sometimes above one wing (usually the right) and under the other one. A Congolese flag would have appeared on the fin.

FAC practice at the time was to give its aircraft a serial prefix consisting of the letter F plus a type letter, perhaps FC in this case. The number was normally the last three digits of the aircraft's previous identity. The Cavaliers would perhaps have been in the cancelled USAF serial batch 68-15797 to -15809, in which case the FAC serials might have been FC-797 and up, painted in white flanking the fuselage national insignia.

Leif Hellström (SAFCH #786), Sweden.



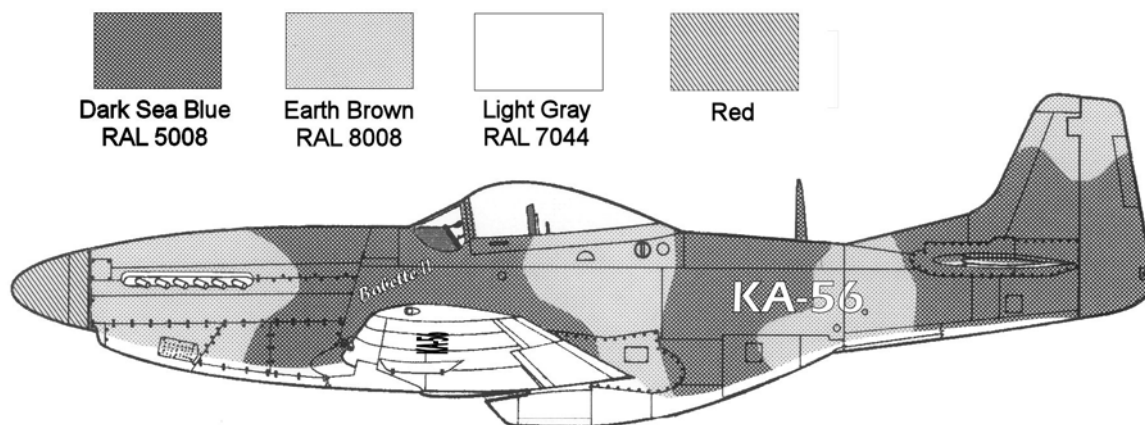
Half a dozen retired IDF/AF Mustangs literally put out to grass in the 1960s. It is possible that some of these had been among the aircraft reportedly sold to Katanga in 1962 through an arms dealer, and even partially paid for. (Amos Peleg via Shlomo Aloni)



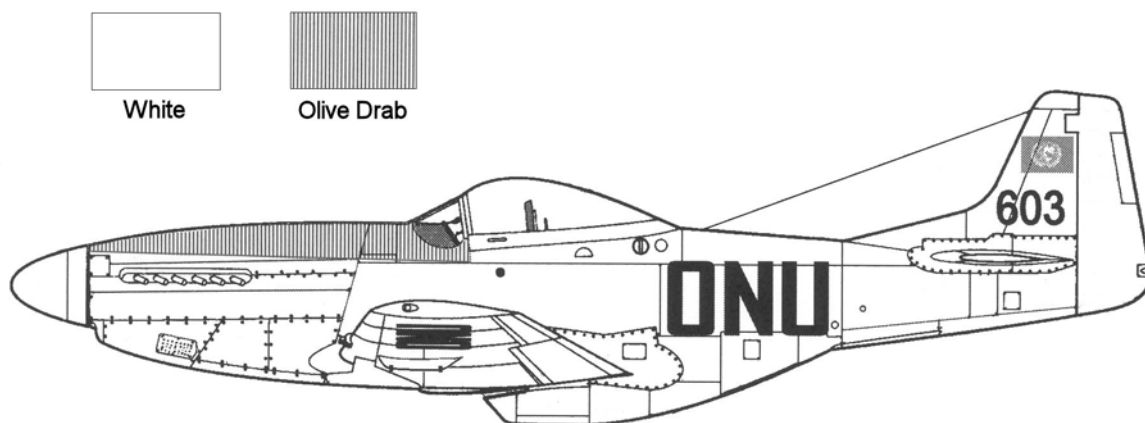
Mustang N6356T as used in the 1968 film "The Mercenaries," set in the Congo. It was overall shabby white with green, white and red-orange (center) roundels. Some have called these roundels "Katangan," but they were probably just a misinformed attempt to depict an Indian UN aircraft. (Barry Flahey)



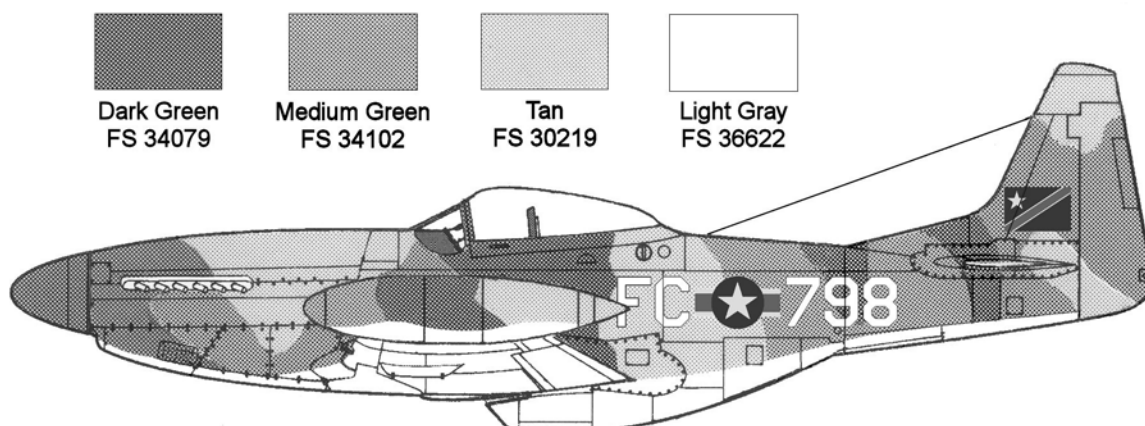
The drawings on this page are hypothetical only and must not be taken to show actual aircraft paint schemes: the Mustang in the event never entered service with any of the air forces depicted here.



F-51D Mustang "KA-56" of the Aviation Katangaise, based at Henrique de Carvalho, Angola, January 1963. The aircraft retains its former IDF/AF colour scheme. The fuselage serial and the name "Babette II" are painted in white.



F-51D Mustang "603" of the UN Fighter Wing, Kamina air base, early 1963. The text "ONU" and the serial are in dark blue. UN flag is light blue and white.



Cavalier F-51D Mustang "FC-798" of Force Aerienn Congolaise, N'Djili airport, Kinshasa, 1968. Painted in US SE Asia colours with white serials.



**Fokker G-1 'Le Faucheur': Jachtkruiser** – deel 1, Frits Gerdessen, et al. 248 A-4 pages. Hardbound. ISBN 978-90-8616-110-2. Published by Lanasta, Slenerbrink 206, 7812 HJ Emmen, Netherlands. Website: [www.lanasta.com](http://www.lanasta.com). Price: € 36.95 which, at the time this is written, is equivalent to \$50.00.

The Fokker G-1 :Jachtkruiser (Hunter Cruiser) was the most advanced Dutch aircraft in service at the time of the German invasion in 1940. Because of its

heavy armament, it received the nickname "Le Faucheur" (The Reaper).

This, the first of a two-volume set, covers the development of the G-1 from the Hispano-Suiza powered prototypes, to the Twin-Wasp powered G-1 built for the Spanish Republicans (but never delivered), to the Mercury-powered G-1 built for the Dutch military.

The book is profusely illustrated with well-reproduced photos of G-1s under construction, under test, and in service. There is also a plethora of original Fokker sketches, 3-view drawings, and documents.

There is a chapter on foreign interest in the G-1, none of which ever came to fruition because of the rapid pace of events proceeding WW2. A final section covers the proposed follow-on projects including the G-2 and G-3.

Sprinkled throughout the book are some very attractive color illustrations. Some of these are of the prototypes and the early-production a/c in Dutch markings, while others are of the 'what-if' type showing the G-1 in the colors of potential users. In the former category are: G-1 at the *Salon de l'Avion* in Paris painted in attractive colors; X-2 at the time of its first light, X-2 after repairs, X-

2 after installing new engines, 301 with Mercury engines, 302 during test flights, and 304 with an observation 'bathtub' for a third crew member. In the 'what is' category are G-1s shown in Spanish Republican, Danish AF, Swedish AF, and Estonian AF markings.

The text is entirely in Dutch, except for English captions to the photos/illustrations and a short, but confusing, 3-page English summary.

The production standards of the book are outstanding: the pages well-printed on quality paper and sturdily bound between hard covers.

A second volume, covering the operational use of the G-1 is scheduled for publication in 2012. (Don't let the cover painting mislead you. All the photos in this first volume of G-1s in service are of ones carrying the pre-WW2 Dutch national markings. This would be a much more appropriate cover for volume 2.)

Books also promised by Lanasta for 2012 include "Fokker C.5" and "Fokker D.21". All of these will be eagerly awaited by enthusiasts of the small air forces.

## -decals-decals-decals-decals-decals-decals-decals-decals-decals-decals-



**Antarctic Helicopters Pt. 1.** 1/72-scale decals. Max Decals #7222. Max Decals, 67 Skreen Road, Navan Road, Dublin 7, Ireland. Website: [joe@maxdecals.com](mailto:joe@maxdecals.com).

It's great to see Joe Maxwell producing decals after an absence of several years. And, very fine decals they are.

This set, the first of two new sets, provides decals for 12 different helicopters that have been operated by various nations in support of Antarctic scientific missions over the past fifty years. Aircraft covered are: (1) Sikorsky S-55 Grupo Aeronaval Antartico Argentine Navy 1968; (2) USN Sikorsky H04S-3 from the icebreaker USS Glacier 1956; (3) USN Sikorsky HUS-1L "Kingpin II" VX-6 in 1957; (4) USN Sikorsky LH-34 operated by VX-6 in 1965; (5-6) Bell UH-IB US Army, 2 schemes 1962-63; (7) Bell 212 Uruguayan Air Force, ca .mid 1990's; (8) AS332B Super Puma, Argentine Army circa mid 1990's; (9) Bell UH-ID US Army, 1969; (10) Bell 412, Chilean Air Force, 2009; (11) Bell UH-ID US Navy VX-6, 1970; (12) CH-101 on board

Japanese icebreaker Shirase in 2010; and (13) Bo-105c Uruguayan Navy in 2010.

The decal sheet (125 mm by 200 mm) is excellent – superbly printed in vivid colors and in perfect register. The 8-page, full-color instructions provides all the views necessary for the correct color scheme and the placement of the multitude of insignia and markings. As you can see from the above list, the enthusiast of the small air force has not been neglected.

Since all helicopters operating in the Antarctic carried high-visibility markings, this set allows modelers to add some very colorful aircraft to their collections.

Ordered directly from Max Decals at the website above, the price is €12 including postage. A 1/48-scale sheet, covering fewer helicopters, is also available at the same price.



**PBY Catalina: FCM 72 043 Part 01.**  
Website: [www.fcm.eti.br](http://www.fcm.eti.br).

This is the latest in a long line of excellent decals from FCM of Brazil. Featured on the 130 mm by 160 mm decal sheet are all the national insignia,

unit insignia, codes, serial numbers, lettering, and stenciling for three “short tail” Catalina amphibians: (1) Brazilian PBY-5, FAB 8185, 2º Grupo de Patrulha, Brazil, 1945. Colors are standard USN intermediate blue over off white. (2) Argentine PBV-1A Canso A, 2-P-10, Escuadra Aeronaval nº 2, 1956, in painted overall in aluminum. (3) Argentine Catalina Mk.II, 5-P-7, Grupo Aeronaval de la Flota, 1958. Colors for the latter Catalina are a very attractive hi-viz scheme of aluminum mid fuselage with gloss dayglo red bow, rear fuselage, and wing tips, with gloss yellow upper surface of the wing.

The two-sided instruction sheet consists of full-color side-view drawings and partial top- and bottom- view drawings of all three aircraft. All colors are identified by their FS595 equivalents. A smaller sheet shows the locations of the stenciling on both surfaces of the wing.

There is a minor problem with the instructions. The partial top- and bottom-

view drawings of the two Argentine Catalina show an anchor on the upper port wing tip and one on the lower starboard wing tip. The modeler is left to guess what is on the other wing tips. Since there are four anchors on the decal sheet, it probably is safe to assume that anchors were carried in all four positions. To verify this assumption, I consulted Jorge Nunez’s book *PBY-5A Catalina* (Serie Aeronaval #13), where I found a full top-view drawing of 5-P-7 showing anchors at both wing tips. From the photos in this book, I think it is safe to assume that anchors appear at both tips on the undersurface of the wing.

This is an excellent decal set that allows the modeler build a “Cat” in a most unusual and attractive color scheme. These decals are available from the SAFCH Sales Service for \$10.00 plus postage (\$0.50 US; \$1.00 rest of world).

### Antarqui Decals

Antarqui Decals reports sales of their decals have been slow. If you have been considering buying any of their decals, now is a good time to act to encourage Antarqui to continue releasing decals for exotic small-air-force subjects.

All Antarqui decals are of good quality and printed over the background color of the aircraft. This avoids the tedium of cutting around the smaller items, but does require the modeler to match the paint to the color of the background.

Antarqui decals can be obtained direct from: Antarqui Decals, 757 Emory St. #106, Imperial Beach, CA 93032, USA. [antarquidecals@yahoo.com](mailto:antarquidecals@yahoo.com). Or, from the SAFCH Sales Service: [safcho@redshift.com](mailto:safcho@redshift.com).

The most recent Antarqui releases are:



**Hawker Hart Floatplane: Estonia. Blackburn Shark Mk.II Floatplane: Portuguese Air Force.** 1/72-scale decals.

This set consists of two decal sheets: one for Estonian Hart ‘146’ and one for Portuguese Shark ‘2’. The Estonian sheet (100 mm by 55 mm) has four Estonian triangles and rudder stripes as well as the ‘146’ with shadow shading - all in the correct black, blue, and white. The Portuguese sheet (80 mm by 40 mm) has four national insignia, rudder stripes with Portuguese crest, and serial ‘2’ and ‘74’ all nicely printed in red, green, yellow, and black. (This is not a repeat of the Novo decals, but an entirely new presentation). The instructions advise that floats for the Hart can be taken from the Shark kit, but they are also available in

vacuform or resin from Antarqui. [Ed: If the floats are taken from the Shark, the Shark can be built as a landplane in RCAF markings.] This double set cost \$5.00 plus \$1.00 postage.



**Ryan STM 150: Guatemala.** 1/48-scale decals.

The Guatemalan STM’s had the front seat covered over and machineguns mounted in above-wing pods. The decal sheet (105 mm by 90 mm) consists of four national insignia, blue/white/blue rudder stripes, two black ‘24’ for the vertical fin, and the long black fuselage flash with colorful ‘owl’ badge. The instruction sheet has scale drawings of the gun pods that can be either scratch-built or ordered from Antarqui. These decals cost \$4.00 plus \$1.00 for postage.

## -letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-

"Just a quick note to let you know that the Latin American Aviation Historical Society's website is up and running once again. Please pass the word to all SAFO members so they can visit us and create their own access accounts. The site can be found at: <http://www.laahs.com>. So far, we only have only a member's forum, but we hope to start publishing historical articles again in the near future."

Mario Overall (SAFCH #1548), Guatemala.

"Since Aeroclub Models no longer exists, Broplan kits are no longer available from England, The best place to buy my kits is the Aviation Megastore in the Netherlands.

"This month I will send my newest kits for review. I hope these will be of interest to SAFO readers."

Janusz Brozek (SAFCH #1297), Poland.

"I have a couple of small additions to the article on the Paraguayan Police Air Fleet that appeared in SAFO #139: The 4th Paraguayan Police UH-1H arrived in Paraguay July 2011 and is ex CC-CBL c/n 9495. R.44, serial A-01, had an accident on 18 April 2010 and another R.44 received the same serial that was used during the repairs of the first A-01. The first A-01 was in use again by September 2011, and for awhile two R.44's with the same serial A-01 were in the hangar at Villa Hayes. The c/n's of the two A-1's are not known, but the engine number of the first is L33927-48E (A-02 eng.no. L33989-48E, A-03 eng.no. L33990-48E)."

Bram Risseeuw (SAFCH #1717), Ireland.

"I just picked up a 1/72-scale decal sheet from Hannants - it is Authentic Decals, #72-19 for the Mi-24V/P Hind E/F. One of the subjects is a Hind-F for Abkhazia. The roundel consists of

white/green/white rings around a central red circle, with a white star on the circle. There is also a roughly-painted green patch, obviously to represent an over-painted Russian marking. It is BRIGHT green, with number 03 in yellow stencil. My main question: is that a correct coloring for the patch, or should it be a more military color? Is there a source for a (preferably color) photo of this aircraft? Anyway, thought it might be of interest.

"The other markings are for Russian Army Aviation (2), Russian "Federal Boundary Service", Georgian Army, and the Russian Golden Eagles Aerobatic/Display Team, in addition to the Abkhazian "Forces of Self-Defence of Republic Abkhazia (per the instructions). That certainly qualifies as Small Air Force!"

Tom Hampton (SAFCH #613), USA.

## -disposals-disposals-disposals-disposals- disposals- disposals- disposals- disposals-

Disposal: I'm cleaning out the SAFO files of items not of direct small-air-force interest. The following are available:

**Panzer Grenadier Division Grossdeutschland**, 176 pages Squadron/Single Publications, \$15.00;. The following soft-cover books are each \$10.00. **Pansergrenadiers in Action** 50 pages; Weapons #5, Squadron/Signal Publications; **Aviation Art of Frank Wootton**, 43 color plates. **Carrier Fighter**, Mizrahi, 72 pages. Sentry Book.

**USAF Aircraft of Today**, Sgarlato, Squadron/Signal Publications; 102 pages (1978). **Superfortress**, Birdsall, Squadron/Signal Publications, 80 pages (1980). **Republic Thunderbolt**, Freeman. Ducimus Classic; 72 pages. **Checkertail Clan**, McDowell. Aero Publishers, 98 pages. **Battle of Britain**, Shores. Aircam Aviation Series #S.1. **Arab Air Forces**, by Charles Stafrace. Squadron/Signal Publications. 64 pages, b&w and color photos, color profile

drawings. On all items postage and packing are extra. Contact [saf@redshift.com](mailto:saf@redshift.com).

Free Kits: **A-1H Skyraider**, 1/48 scale, Monogram #5454. **BAe Hawk T.Mk 1A, Red Arrows**, 1/48 scale, Premiere #P3102. Two of each available. **Messerschmitt Me 163B**, 1/32 scale, Hasegawa #JS-087:700. One available. You pay only for packing and postage. Contact [saf@redshift.com](mailto:saf@redshift.com).

### Captions for the Photos on page 143

As US, ROK and other UN ground forces advanced northwards in the autumn of 1950, they overran a number of KPAF bases. The derelict Il-10s strewn about these bases offered mute testimony to the size – and the destruction – of the KPAF at the start of the war.

1. Yonpo was a former IJAAF base that was the home of one squadron of Il-10s belonging to the 57<sup>th</sup> Assault Aviation Regiment. During their evacuation, the unit left behind a number of derelicts; this one was probably serialised "102". (Richard Pechner via Doug Dildy)
2. Wonsan was a former IJNAF air base and depot closer to the front/38<sup>th</sup> Parallel. Once the initial offensive moved south, the Yonpo squadron deployed there to support KPA units advancing through the central highlands and down the rugged east coast. Battered by FEAF and USN air raids, by the time that it was overrun during the UN counter-offensive, it was only home to a number of derelict Il-10s, most of them pulled, pushed and bulldozed into a corner of the airfield. (Richard Pechner via Doug Dildy)
3. More derelicts at Yonpo. Based on the fact that "X02" was also found here, this aircraft was probably numbered in the 100-109 series, with the third digit on the missing rudder. Note the FEAF or ROKAF F-51D and USMC F7F-3N Tigercat from VMF(N)-513 in the background. (Wayne Jackson via Warren Thompson)
4. Meanwhile on Korea's west coast, the 57<sup>th</sup> Assault Aviation Regiment's Heijo (Pyongyang) squadron had deployed forward to Kimp'o AB, where it was devastated by USAF bombing and strafing raids. Il-10 #54 was probably "bellied in" (note bent propeller blade) during operations, stripped of useful parts – including its outer wing panels – and dragged into a nearby field where it was found by advancing UN troops. (Bill Williams via Warren Thompson)





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PLAAF MiG-9, red 86104, on display at the Chinese Armed Forces Museum at Beijing. It wears a “tiger stripe” camouflage pattern of light/yellowish and dark/olive green, very similar to that used by Soviet (and PLAAF and KPAF) La-11 night-fighters during the Korean War. (Yu Ming via Doug Dildy)



PLAAF MiG-9 (white 30) on display at the Chinese Aviation Museum at Datangshan, near Beijing. It is painted overall dark green over grey, the standard Soviet scheme for training aircraft. (Mark Pasqualino via Doug Dildy)