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OSPREY AVIATION ELITE • 4

Lentolaivue 24

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OSPREY
AVIATION

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HUMBLE BEGINNINGS

Utti air base in south-eastern Finland has long been recognised as the ‘cradle of the fighter pilot’ following its establishment in June 1918 – six months after the Finnish declaration of independence from then Imperial Russia. As the only airfield for land-based aircraft in the country, Utti was home to all flying training and frontline fighter units for over a decade. Indeed, it was not until 1929 that a second military airfield was built close to Viipuri at Suur-Merijoki. By this time the Finnish Air Force had established an effective maritime flying arm thanks to the instruction of a British military team headed by Maj Gen Walter Kirke.

Flying boats and floatplanes continued to dominate Finnish military aviation until the mid-1930s, and this was one of the primary reasons why the air force boasted such a small fighter arm at the start of World War 2. Another principal cause was that much of the meagre pre-war Finnish military budget had been invested in two 3900-ton light cruisers purchased to boost the image of the navy! These warships subsequently saw very little use during World War 2, for they were always vulnerable to attack from the air when at sea due to the dense archipelago of the Gulf of Finland.

The modernisation of the air force finally commenced on 15 July 1933 when a series of new air stations were created, and each one allocated one or two previously-established squadrons. Utti was designated *Lentoasema 1*, and its squadrons were also numbered – the army co-operation unit became *Lentolaivue (LLv) 10* and the fighter outfit *Lentolaivue 24*.

LLv 24 was then equipped with licence-built Gloster Gamecock IIIs, which it had received three years earlier. These had replaced French Gourdou-Leseurre GL-21s (20 of which were purchased in 1923) and British Martinsyde F.4 Buzzards (15 acquired).

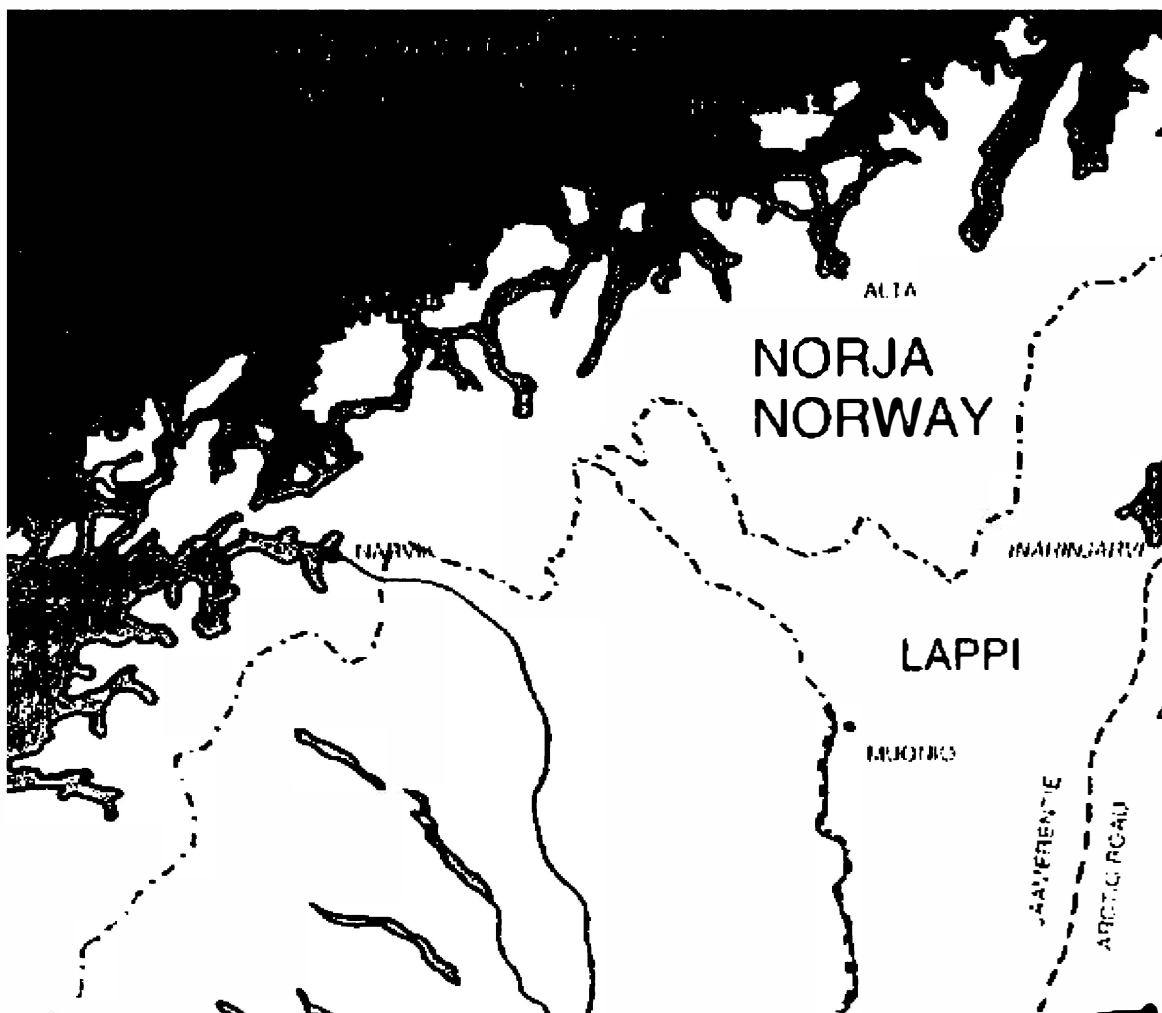
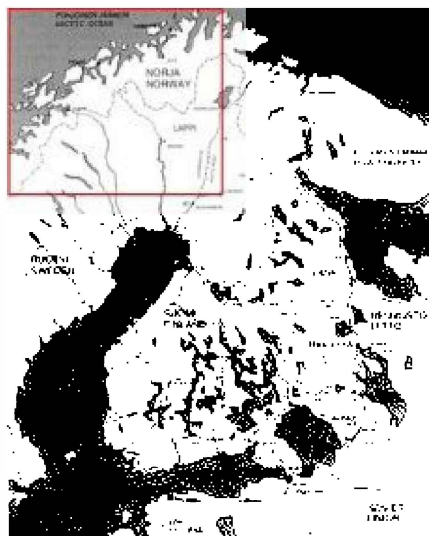
FIGHTER TACTICS

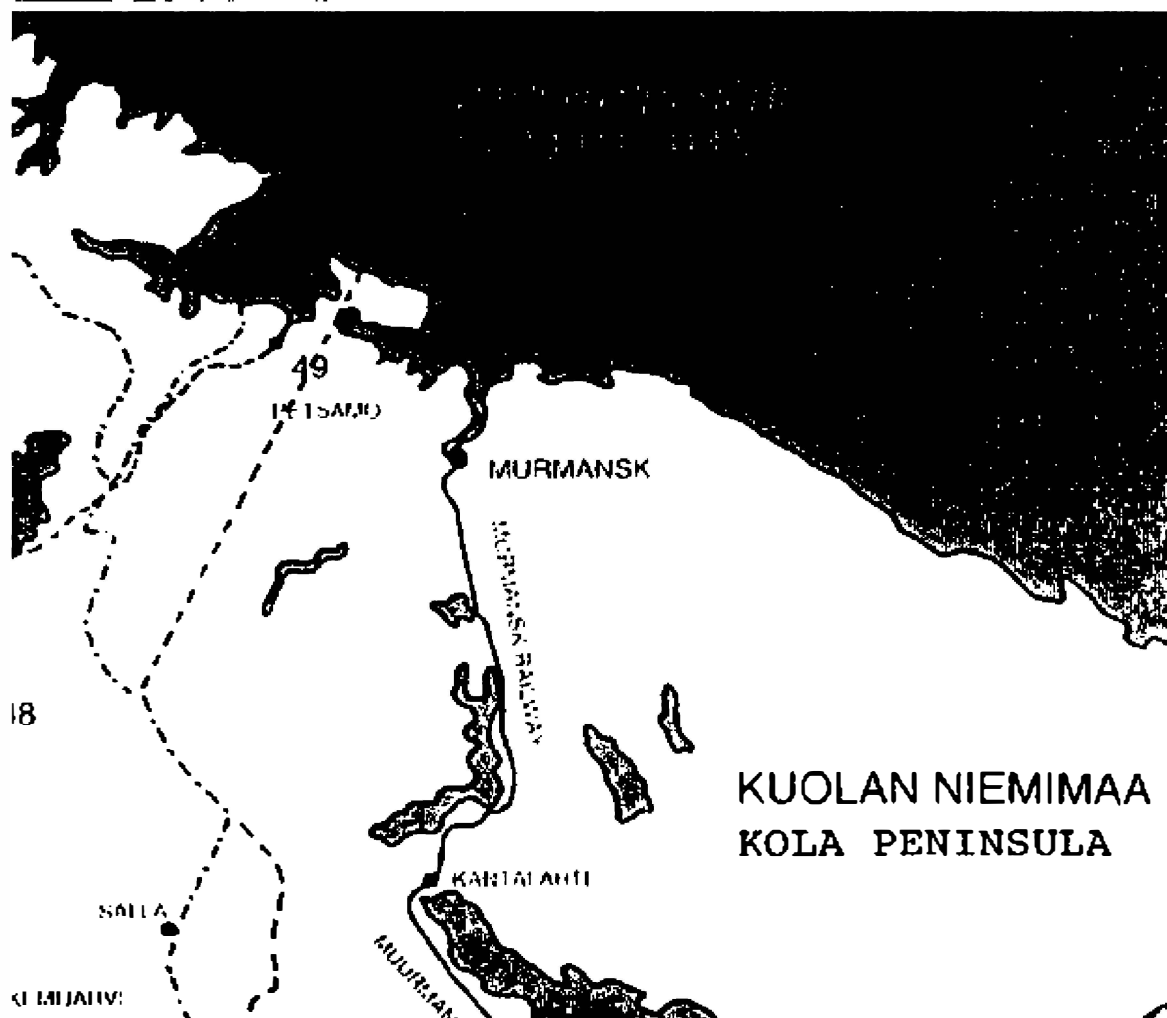
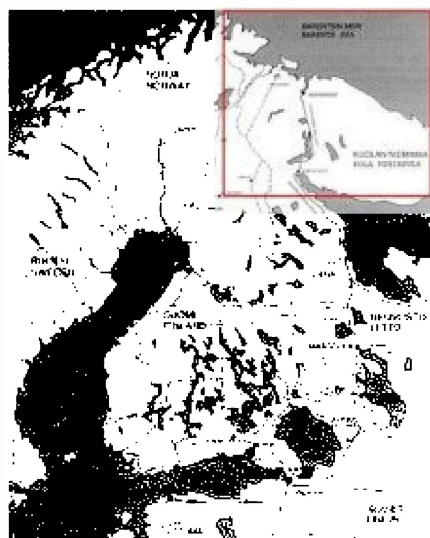
The Gamecocks gave great service, and in 1934 LLv 24’s commanding officer, Maj Richard Lorentz, used them to experiment with new fighter tactics which saw the traditional lead aircraft and two wingmen formation reduced to just a ‘fighting pair’. This proved to be both more flexible and better suited to most tactical conditions, and could be easily increased to a four-aircraft ‘swarm’ (dubbed a ‘finger-four’) when the need arose.

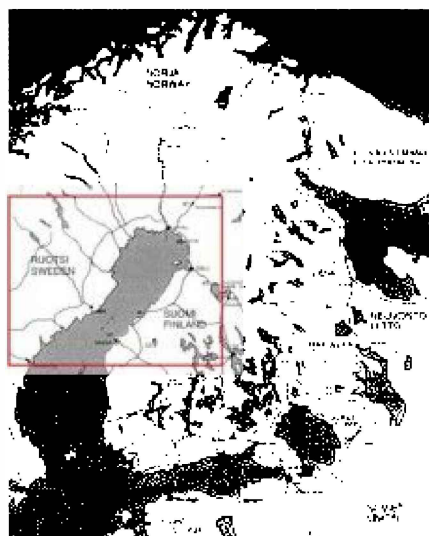
Further tactical improvements within LLv 24 were implemented following Capt Gustaf Magnusson’s arrival as CO on 21 November 1938. Prior to his appointment, he had visited other air arms in Europe, including a three-month spell with the

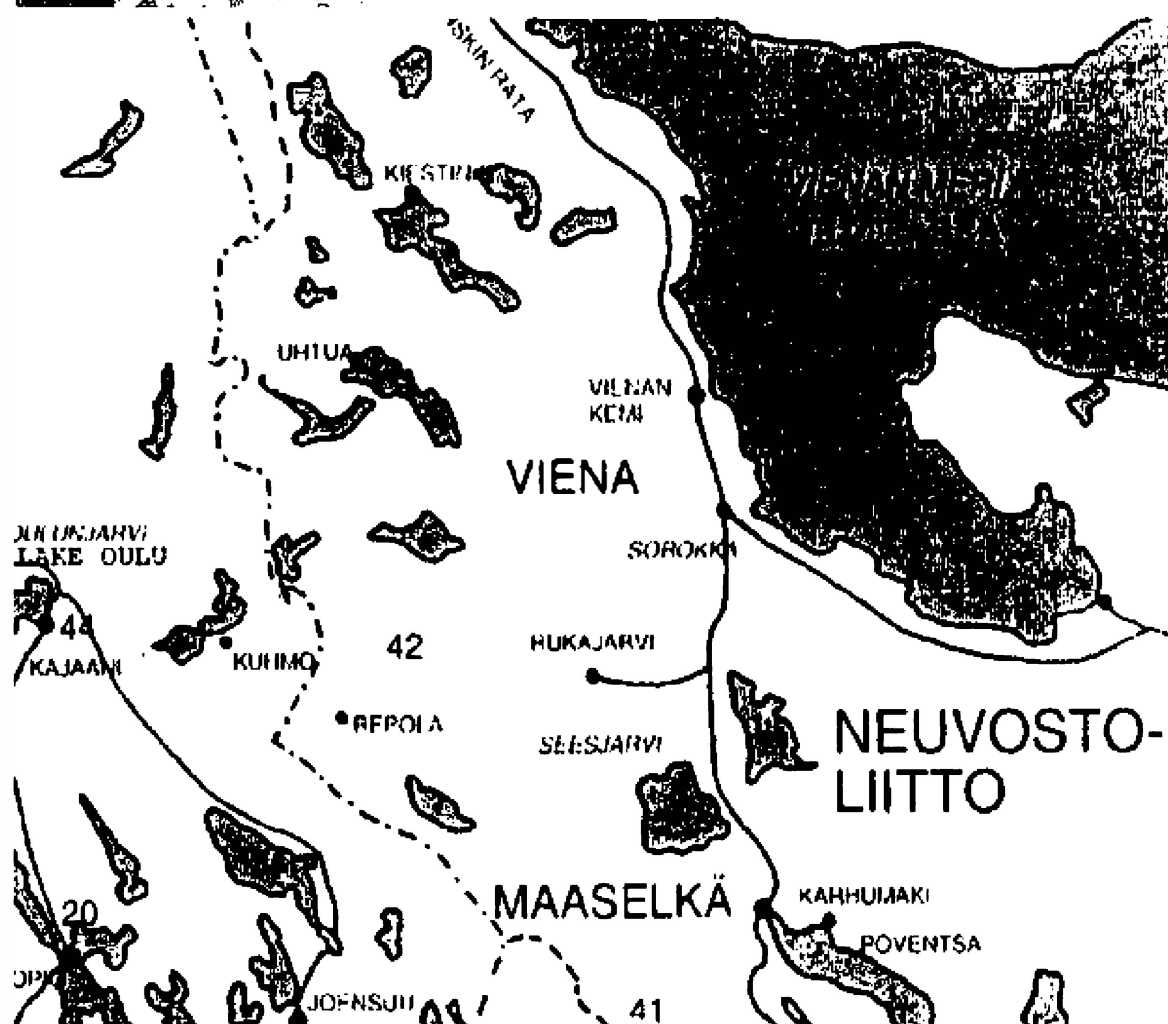
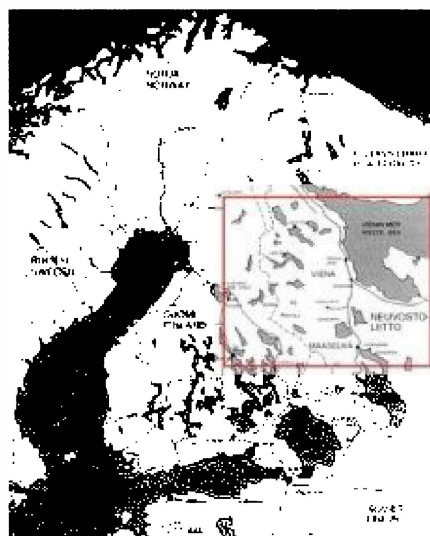
Luftwaffe's JG 132 '*Richthofen*'. A number of its pilots had recently seen action in the Spanish Civil War, and Magnusson received valuable information on how best to destroy Soviet Tupolev SB bombers and Polikarpov I-15bis and I-16 fighters. The Germans had also abandoned the three-aeroplane formation in favour of the 'finger-four', and this convinced senior officers in the Finnish Air Force of the soundness of LLv 24's fighting formations and basic tactics.

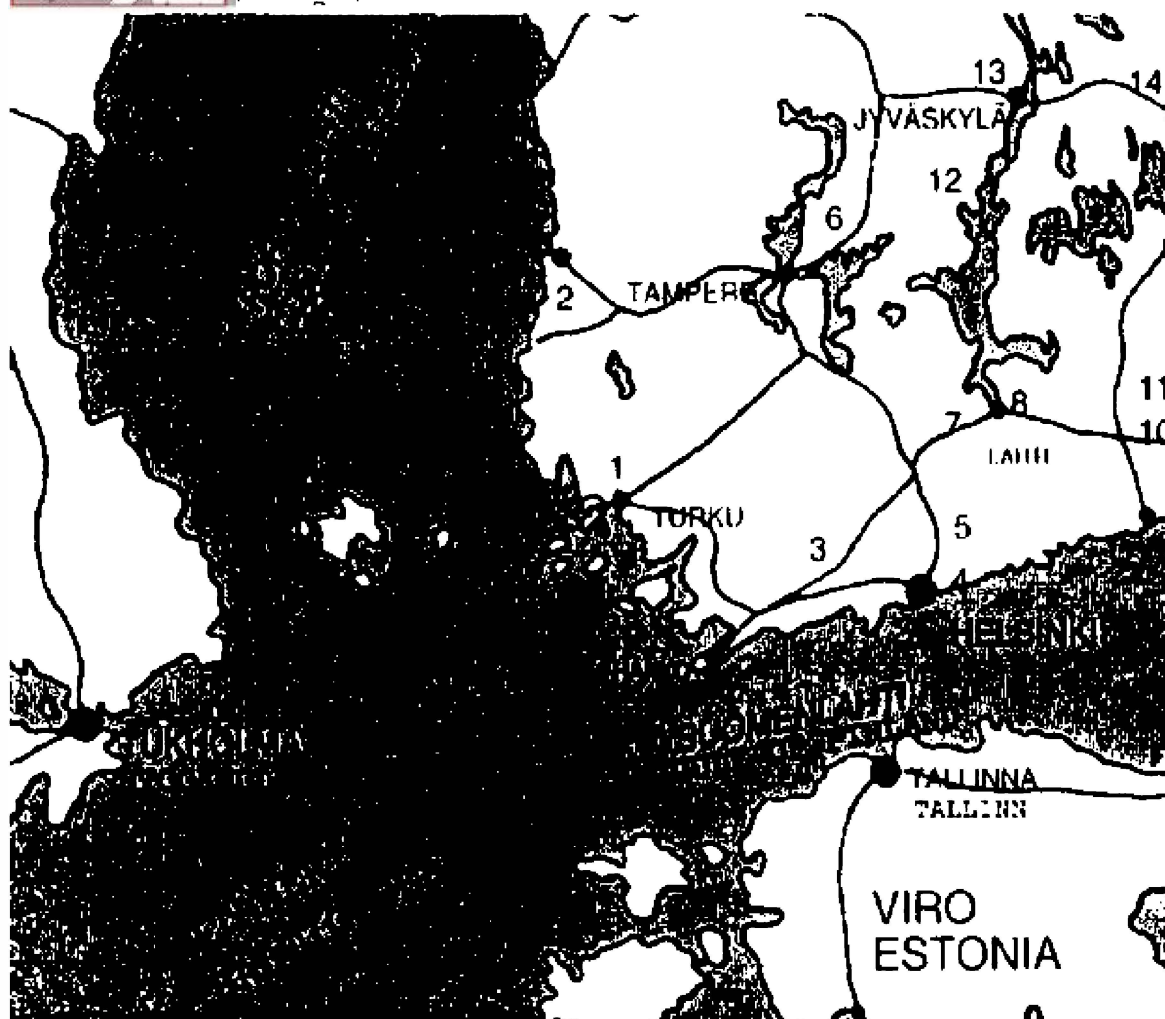
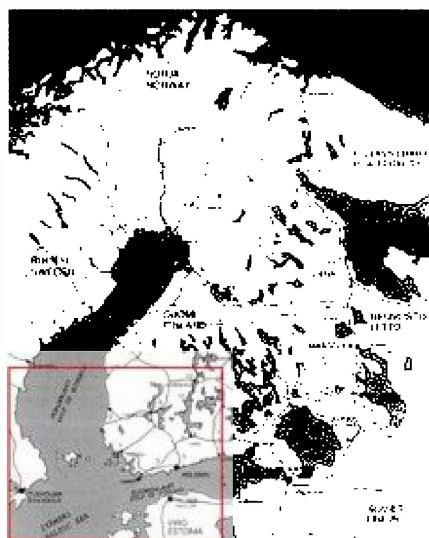
Yet poor funding continued to restrict pre-war fighter pilots from receiving anything but elementary flying training prior to reaching the frontline. And even once they had arrived at LLv 24, pilots found that advanced training rarely explored more than three types of attack, for it had been discovered that such a number was sufficient to down a bomber – the Finnish fighter pilot's principal target. The trio of attacks (and associated aerial gunnery) adopted by LLv 24 were thoroughly rehearsed, and this style of training suited both the air force and the Finnish treasury.

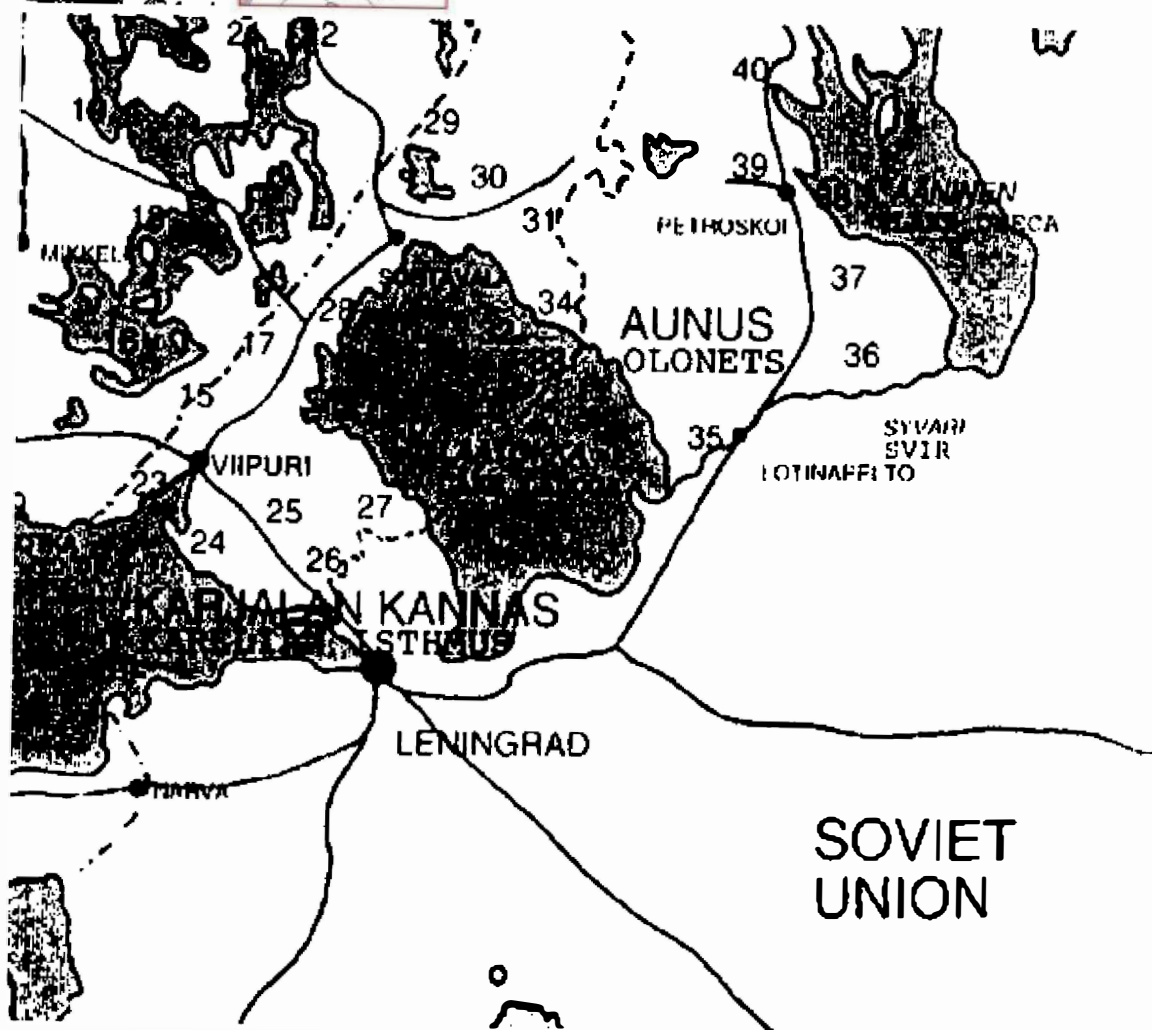












AIRFIELDS

1. Turku
2. Pori
3. Nummela
4. Malmi
5. Hyvinkää
6. Siikakangas
7. Hollola
8. Vesivehmaa
9. Kymi
10. Utti
11. Selänpää
12. Kuorevesi
13. Luonetjärvi
14. Naarajärvi
15. Lappeenranta
16. Taipalsaari
17. Immola
18. Rantasalmi
19. Joroinen
20. Rissala
21. Onttola
22. Joensuu
23. Suur-Merijoki
24. Römpötti
25. Heinjoki
26. Suulajärvi
27. Kilpasilta
28. Mensuvaara
29. Värtsilä
30. Suistamo
31. Uomaa
32. Mantsi
33. Lunkula
34. Karkunranta
35. Nurmoila
36. Latva
37. Derevjannoje
38. Solomanni
39. Viitana
40. Kontupohja
41. Hirvas
42. Tiiksjärvi
43. Kauhava
44. Paltamo
45. Vaala

- 46. Kemi
- 47. Rovaniemi
- 48. Vuotso
- 49. Petsamo

When practising aerial attacks, guns were set to converge at 150 metres, but pilots were trained to hold their fire until just 50 metres away from the target. Such closeness brought with it certain risks, but these were deemed to be outweighed by two major advantages: 1) you were too close for any defensive fire to be aimed with any accuracy, and 2) you could not miss!

When war broke out Magnusson ordered that fighter duelling was to be avoided, for LLv 24's Fokker D.XXIs could not turn with Russian I-15s and I-16s. However, the Dutch design was a capable interceptor, possessing a good rate of climb and the ability to dive away from the enemy.

On 1 January 1938 the air stations were replaced by flying regiments, and newly-delivered D.XXIs were issued to both of *Lentorykmentti 2*'s fighter units, LLv 24 and 26. An intensive training period ensued, and both FR-79 and FR-88 (and their pilots) were lost in accidents.

FOKKER D.XXI

The Finnish Air Force initially became involved with Fokker designs when it purchased a number of C.V army co-operation aircraft in the early 1930s. These were in turn replaced in the spring of 1936 by the C.X, these being bought as part of the new five-year plan which also called for the acquisition of 27 'interceptors' to equip three squadrons.

Fokker had offered the Finns its new low-wing monoplane D.XXI fighter for export, and they duly became the aircraft's first customer on 18 November 1936. Seven aircraft were ordered, and a licence was also acquired to produce double this amount at the *Valtion Lentokonetehtas* (State Aircraft Factory). Bearing Finnish serial numbers FR-76 to FR-82 (series I) inclusive, the Dutch aircraft arrived in Amsterdam on 12 October 1937 and were shipped on to Finland in crates. Each D.XXI cost 1.1 million Finn marks apiece without an engine.

On 7 June 1937 an order was placed with the *Valtion Lentokonetehtas* for 14 series II aircraft (serialled FR-83 to FR-96). Completed between 11 November 1938 and 18 March 1939, these D.XXIs cost just half the price of the Dutch examples.

An open licence had also been obtained on 15 June 1937, which allowed 21 series III aircraft to be built between 16 March and 27 July 1939 – just in time for the

Winter War. These fighters were serialised FR-97 to FR-117 inclusive.



The first D.XXI issued to LLv 24 was FR-76, which is seen here in front of LA 1 hangar No 2 on 16 December 1937. Its unique 20 mm Oerlikon cannon are clearly visible under the fighter's wings. On 29 January 1940 2Lt Olli Puhakka downed a DB-3M from 43.DBAP (long-range bomber aviation regiment) with just 18 rounds fired from a distance of over 500 metres (see chapter two). Within a week machine guns had replaced the cannon, allowing the fighter to comply with the rest of the unit's machines (*Finnish Air Force*)

WINTER WAR

Germany launched its long-awaited attack on Poland in the early hours of 1 September 1939, and seized the western areas of the country within three weeks. According to the Ribbentrop-Molotov non-aggression pact signed between the Nazi regime and the Soviet government just weeks prior to the invasion, Poland was carved up between the two countries. A secret clause appended to the pact left the Baltic countries, and Finland, to the Soviet Union, which now also occupied the eastern provinces of Poland. At the same time the communists demanded air and naval bases from then independent Estonia, Latvia and Lithuania, which had to comply due to the weak state of their armed forces. The Soviets then turned their attention to Finland.

Having enjoyed success with the Baltic states through the application of massive diplomatic pressure, the communists initially tried to acquire military bases from Finland through identical means. Realising that the Germans would eventually attempt to invade at some point in the near future, the Soviets wished to shift their border further west from Leningrad. In return for giving up this land, Finland would get twice the area of wilderness further north in Soviet Karelia. All communist overtures were disguised under the 'safety of Leningrad' banner, which the Finns correctly suspected was a cover for the total conquest of their country. The Finnish government flatly refused this insult to its sovereignty.

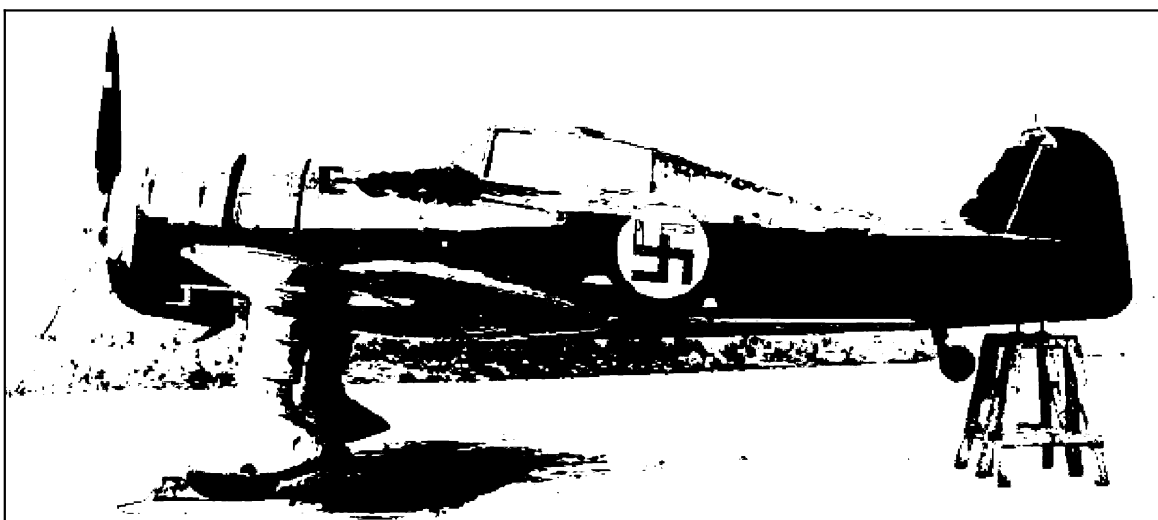
Following the receipt of this answer, the Soviet Union annulled the non-aggression pact signed with Finland in 1932 and launched an invasion on 30 November 1939. So started the 'David and Goliath' struggle that was the Winter War.

RE-EQUIPMENT

In 1937 the Finnish Air Force had issued a five-year development plan which called primarily for the acquisition of 'interceptors'. It had been correctly deduced that any enemy attacking Finland would rely heavily on the large-scale use of bombers, without fighter escort. With only limited funds available, the Finns would have to procure these interceptors from sources other than the major European powers, which could not spare military aircraft in the growing climate of political tension. And because of the difficulties encountered in obtaining modern fighters, the air force had only received two-thirds of its aircraft when the Red Army attacked.



Neatly lined up at an airshow held at *Lentoasema* (Air Station) 5 – previously known as Suur-Merijoki – on 3 August 1935, these Gloster Gamecock IIIs of LLv 24 provided the bulk of Finland's frontline fighter defence for much of the 1930s. The unit was based at Utti – home of *Lentoasema* 1 – at the time. On 1 January 1938 aviation regiments were formed to replace the air stations, and Utti became the home of *Lentorykmentti* 2. Some 17 Gamecocks saw exactly a decade of service with the Finnish Air Force from 1929 through to early 1939, when they were replaced by Fokker D.XXIs (*Finnish Air Force*)



LLv 24's Dutch-built D.XXI FR-80 is seen with its tail hoisted up on a trellis at Utti on 30 August 1938. Once in this configuration, the fighter became the subject for a series of recognition photographs taken by an

air force photographer. All seven machines imported directly from Holland featured dark brown upper surfaces and aluminium dope undersides, while the Finnish-built D.XXIs were painted standard air force olive green and light grey. FR-80 was subsequently shot down over Helsinki by an I-16 from 25.IAP on 19 February 1940. Its pilot, 1Lt Erhard Frijs, was killed (*Finnish Air Force*)

The Soviets had mustered 450,000 men in close to 20 divisions along the Finnish border. These troops were supported by 2000 artillery pieces, 2000 tanks and 3253 aircraft – the latter would fly an average of 1000 sorties per day throughout the war. In opposition, the Finns committed five divisions, 300 guns, 20 tanks and 114 serviceable aircraft to the main front at the Karelian Isthmus.

All Finnish fighter defences were controlled by *Lentorykmentti 2*, which was commanded by ex-LLv 24 CO, Lt Col Richard Lorentz. When it was realised that the political situation was deteriorating towards war, his old unit was one of two fighter squadrons that Lorentz was ordered to disperse to new airfields away from their usual bases. The D.XXI-equipped LLv 24 received a further ten Fokker fighters – and pilots – from LLv 26 (the other squadron to move) on 26 November 1939, leaving the latter unit with just ten obsolete Bristol Bulldogs. Following this switch, Finland's entire frontline fighter force consisted of just LLv 24! Its commanding officer, Capt 'Eka' Magnusson, would later show exceptional tactical and personal leadership as he led his 35 Fokkers into battle over and over again.

LLv 24 was ready to be dispersed along the frontline of south-eastern Finland, its well-trained and highly motivated pilots being split into the following five flights;

Lentolaivue 24 on 30 November 1939

Commander Capt Gustaf Magnusson, with HQ at Immola

1st Flight	Capt Eino Carlsson at Immola with six D.XXIs
2nd Flight	1Lt Jaakko Vuorela at Suur-Merijoki with six D.XXIs
3rd Flight	1Lt Eino Luukkanen at Immola with six D.XXIs
4th Flight	Capt Gustaf Magnusson at Immola with seven D.XXIs
5th Flight	1Lt Leo Ahola at Immola with ten D.XXIs

LLv 24's task was to protect the traffic junctions in south-eastern Finland, and prevent attacks either on or through the Karelian Isthmus. Although the D.XXI lacked speed and heavy armament, it was an ideal interceptor, with a good rate of climb and excellent diving characteristics. And with fixed ski-landing gear, it could be flown from very austere bases.

FIRST ENCOUNTERS

On 30 November 1939 the Soviets sortied 200 bombers against both towns and bases in southern Finland, and due to poor weather the interceptors failed to engage the Soviet force. Helsinki was among the locations to be bombed when eight Ilyushin DB-3s of 1.MTAP KBF (a mine-torpedo aviation regiment of the Red Banner Baltic Fleet) caused close to 300 civilian casualties, including nearly 100 dead. This horrendous loss of life brought the Finns much sympathy from countries across the globe.

Ironically, recent research in the Russian archives has revealed that the bombing of Helsinki's city centre took place by mistake, with the actual target being the port and oil storage facility at Herttoniemi, several kilometres further east.

On the morning of 1 December the Red Air Force sent out a wave 250 unescorted bombers to hit the same targets that had been successfully attacked 24 hours earlier. The Finnish fighter pilots were determined to effect an interception following the disappointment of the previous day, and LLv 24 scrambled its Fokkers in pairs, led by the CO Capt Magnusson in his assigned D.XXI, FR-99. A total of 59 sorties were flown by the unit, whose pilots claimed 11 Tupolev SB bombers destroyed in the Viipuri-Lappeenranta area - eight from 41.SBAP (fast bomber aviation regiment) and three from 24.SBAP.



LLv 24's inspirational commander, Gustaf Erik 'Eka' Magnusson, was promoted to major on 6 December 1939. To mark the occasion, he gave a speech to his men at Immola – where this photograph was taken. Behind him are D.XXIs FR-105 and FR-106 (*I Juutilainen*)

The first fell at 1205 hrs to 2nd Flight leader 1Lt Jaakko Vuorela (in FR-86), and the last at 1440 hrs to 5th Flight boss 1Lt Leo Ahola (in FR-113). Vuorela also claimed a second SB to become the first Finnish pilot to claim more than one kill. The remaining victories were scored by Capt Gustaf Magnusson, 1Lts Eino Luukkanen and Jussi Rätty, 2Lt Pekka Kokko and Sgts Lasse Heikinaro, Lauri Nissinen, Lauri Rautakorpi and Kelpo Virta.

Sadly, no combat reports exist from these first encounters, for such forms were not made available for another three weeks! However, Capt 'Eka' Magnusson insisted that every pilot involved in combat on this day should make a record of his experiences. His own note reads;

'1/12/39 at 1410-1445 hours. We took off following an announcement that a Soviet bomber formation was approaching Imatra. We met the formation above Imatra. I attacked the bomber flying on the extreme right wing of the formation, shooting first along its fuselage. When my firing did not seem to have any effect, I aimed at the starboard engine instead, which started to smoke after a few bursts.

'I then had to interrupt my attack since the bomber to the left of my target had reduced his speed so that he was about 70 metres off my port side, with his dorsal gunner firing at me. I too slowed down and attacked this aeroplane instead, shooting it down in flames – the bomber continued to burn after hitting the ground. Since the squadron had only normal bullets and tracer rounds, it was impossible to gain results with a small amount of ammunition – hence I fired 1200 rounds. I was flying FR-99.'

Capt Magnusson's clinical attack proved to his men that the tactics taught to the pilots of LLv 24 throughout the 1930s would allow them to engage a numerically superior enemy with confidence.

The unit suffered its first loss of the conflict shortly after its opening successes when 'friendly' anti-aircraft fire at Viipuri downed FR-77, killing Sgt Matti Kukkonen. A further loss occurred when the squadron 'hack', de Havilland Moth MO-111, was struck by a bomb at Immola.

Possessing such few fighters, the Finns had wisely mobilised their forces several weeks prior to the Soviet invasion in an effort to avoid the D.XXIs being caught on the ground at the principal air force bases. Following the opening 48 hours of the Winter War, Maj (from 6 December) Magnusson also made operational changes in an effort to shorten LLv 24's chain of command. These saw the 2nd and 5th Flights combined as

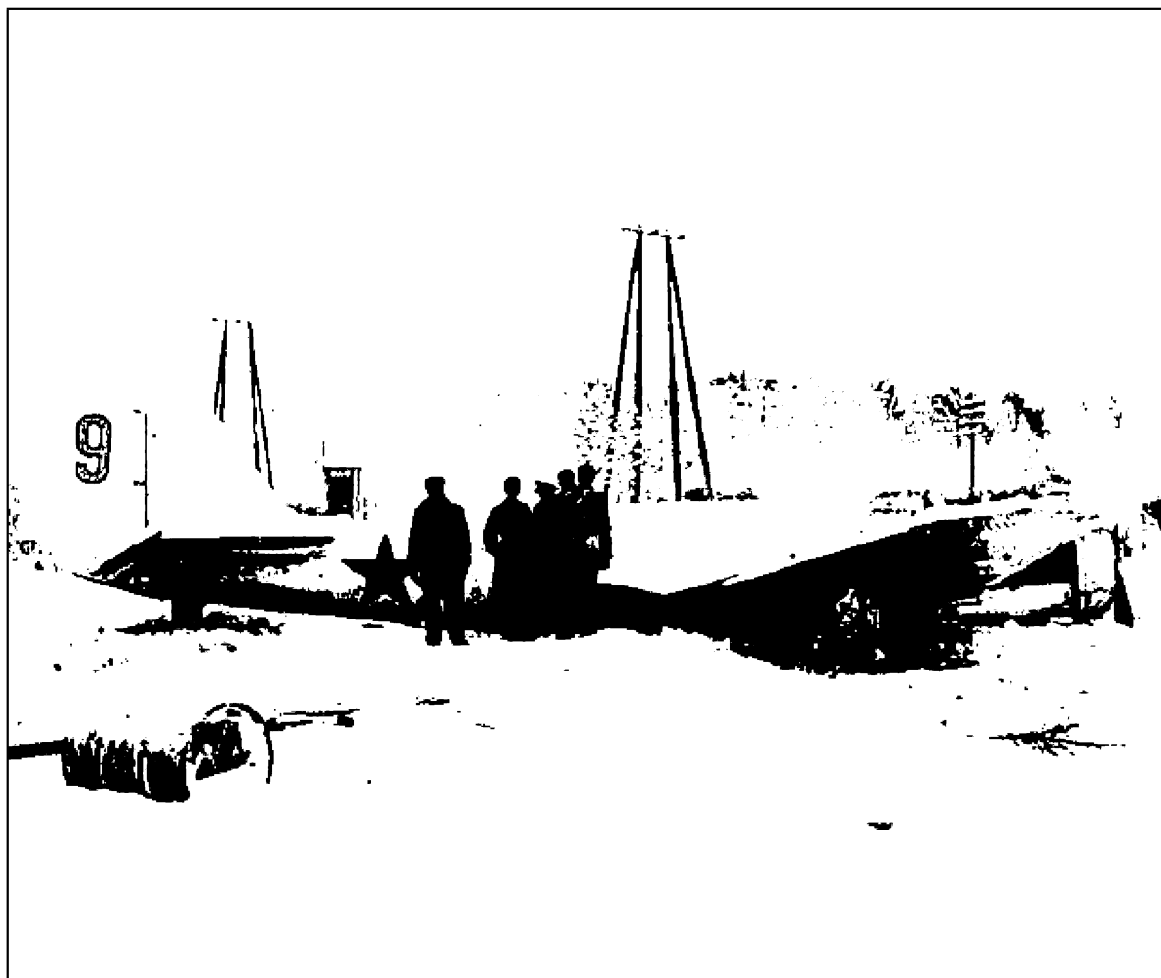
Detachment Vuorela and transferred, on 9 December, to Lappeenranta, whilst the 1st Flight moved to Mensuvaara. On 18 December the squadron was relieved of defensive duties in western Finland, allowing it to concentrate fully on supporting the army on the Karelian Isthmus.

Poor weather and snow fall stopped all operational flying until 19 December, when LLv 24 flew 58 sorties over the Karelian Isthmus and engaged the enemy in combat on 22 occasions between 1050 and 1520 hrs. The Soviets lost seven SBs (six from 44.SBAP) and five Ilyushin DB-3s from other regiments, SSgt Kelpo Virta (in FR-84) being the first pilot to engage Soviet aircraft on this day. He had encountered I-16 fighters, from 25.IAP, rather than bombers, however;

‘I was flying as a wingman in a three-aeroplane division, patrolling south-east of Viipuri (Vyborg), at 1010 hrs when we observed nine I-16s ahead and 500 metres below us. The enemy fighters formed a circle and started to gain altitude. We did the same. Sgt Nissinen then dived down to attack them, and I followed him down with the sun behind me. I attacked an enemy aeroplane which was a little apart from the others, firing a couple of bursts from 50 metres. The tracers seemed to hit but without any result, so I repeated my attack and shot at him from very close range. The enemy aircraft caught fire after two bursts and I pulled up. I looked around and saw none of my squadronmates.



Pilots from LLv 24 pose in front of FR-110 in January 1940. They are, from left to right, Sgt Martti Alho, 2Lt Tapani Harmaja, 1Lts Jussi Räty and Veikko Karu, Maj Gustaf Magnusson, MSgt Sakari Ikonen, WO Viktor Pyötsiä (stood behind Ikonen), 2Lt Iikka Törrönen, 1Lt Per-Erik Sovelius (stood behind Törrönen) and an unnamed war correspondent. Tapani Harmaja was killed in action on 1 February 1940 and Sakari Ikonen wounded nine days later (*J Sarvanto*)



Its hot engines still steaming in the snow, this Tupolev SB-2M-100 was downed by 1Lt Jussi Räty of 4/LLv 24 in FR-115 on 1 December 1939 at Imatra. 'Yellow 9' (construction number 20/101) belonged to 41.SBAP (fast bomber aviation regiment), and of its crew of three, pilot Lt Zhorka Tanklayev and navigator 1Lt Viktor Demchinskiy were captured, while gunner Cpl Sergei Korotkov was killed (SA-kuva)



SSgt Lauri Nissinen leans on his D.XXI whilst posing for the camera in early 1940. A member of the 5th Flight, he had claimed an I-16 damaged over the Karelian Isthmus on 23 December 1939 whilst flying FR-98. According to his combat report, the Polikarpov fighter bore the tactical number '228' – unusually high for the Red Air Force, which usually employed two-digit numbers (*E Luukkanen*)

'I then attacked a second aircraft, firing short bursts from behind it at distances ranging from between 50 to 20 metres. By this stage we were both diving at a 45-degree angle. The aircraft started to emit white smoke, and it increased the angle of its

dive until it was almost vertical. I then spotted three other enemy aeroplanes behind me, so I banked steeply, went into a spiral dive, levelled off and fired at an I-16 coming towards me. I ended up below my enemies, so I dived for the ground and came home.

‘The battle started over the northern end of Lake Muolaanjärvi at 1015 hrs and ended at the northern end of Lake Suulajärvi at 1025 hrs. I fired 650 rounds, and my starboard wing gun was out of order. I was flying FR-84.’



This photograph proves that Nissinen’s damage claim needed to be upgraded to a full kill! The wreckage of ‘Red 228’ was photographed at Muolaa on 28 December 1939 following its recovery by the Finns. The downed I-16 proved to be a 25.IAP (fighter aviation regiment) machine, and its pilot, 1Lt Iosif Kovalkov, was made a PoW (*Finnish Air Force*)

Troops on the ground had seen two I-16s crash nearby, and Virta was duly credited with having destroyed both aircraft. LLv 24’s adjutant interviewed every pilot engaged in combat on this day, and summarised events in combat report style. 1Lt ‘Pelle’ Sovelius, flying FR-92, recounted;

‘On 19/12/39, from 0955 to 1105 hrs, I was leading the third pair on an air combat patrol, with Sgt Ikonen on my wing. After being scrambled and climbing out over Antrea, we were ordered by radio to change course and head towards the south-west. When nearing Kämärä, I observed a seven-aeroplane SB formation and commenced the

chase. The SBs initially flew towards the south-west, although they then turned due south. Failing to gain on them, we then observed three more SBs flying in roughly the same direction.

‘Sgt Ikonen quickly got in behind the aeroplane on the starboard wing of the formation and shot it down in flames from very close range at an altitude of 2000 metres over Kipinola. I tried to get in behind the bomber to port, but did not have enough speed. I observed another three SBs heading south-west and tried to get after them, but they quickly pulled away. These aeroplanes were dispensing leaflets.

‘During the chase I observed three more SBs a little below me, heading southwards. I picked out the port wingman as my target, and initially shot into its rear fuselage to silence the dorsal gunner. After this I aimed my guns at the port engine, which began to smoke and finally caught fire. The aeroplane fell away to starboard and dived into the sea close to Seivästö, about ten kilometres from the coast.

‘I then fired at the starboard wingman, whose right engine started to pour smoke, but it steadfastly remained in formation with the lead aeroplane. I performed the return flight at heights of between 3000 and 5000 metres, and when about five kilometres above the land I observed flak. Whilst flying along the south coast of Lake Muolaanjärvi, two I-16s managed to take me completely by surprise by diving out of the sun. I woke up when bullets smashed into my aeroplane.

‘I instantly pulled in towards them, but quickly realised that the I-16 was more agile than the Fokker. I tried to tighten my turns, but only managed to get the enemy aircraft into my sights on one occasion, firing a short burst. It was at this point that I noticed that I only had ammunition left in one gun. After trying to turn as tightly as possible, I stalled the fighter and it fell into a spin. I continued to perform all manner of evasive actions until nearing the ground, where I managed to shake off my pursuers. I was then nearby Heinjoki. Both I-16s had attacked simultaneously, and in order to avoid a collision they had not got in straight behind me, instead being forced to shoot with a small deflection. Judging by their tracers, the I-16s seemed to continue firing even when I was clearly out of their sights.

‘I landed with two holes in my aircraft. One round had struck the tailplane and the other had gone in through the machine gun compression bottle hatch and out the bottom of the fuselage.’

Four days later the luckless 44.SBAP was again badly mauled by Magnusson’s Fokkers, losing six SBs between 1100 and 1200 hrs over the Karelian Isthmus. 1Lt Jorma Sarvanto claimed two in FR-97, while Maj ‘Eka’ Magnusson, 1Lt ‘Joppe’ Karhunen and WO ‘Pappa’ Turkka each downed one apiece – the destruction of the sixth bomber was shared. Here, Magnusson describes shooting down his bomber in FR-99;

‘Sgt Kinnunen, flying on the left flank of the formation, observed nine SBs over Vuoksenranta. I dived after Sgt Kinnunen, who then pulled away thinking that I was an I-16.

‘I continued after the formation and intercepted it over Kiviniemi. I chose the rearmost bomber on the left flank as my target, firing firstly at its starboard engine, which started to smoke. I then hit the port engine and it too burst into flames. The aeroplane then began to descend.

‘Tactically, the enemy unit worked well, lowering their landing gear simultaneously for speed reduction. The aircraft next to the one under attack also reduced his speed so as to improve the rear gunner’s field of fire.

‘At 1200 hrs the aircraft hit the ground at Lempaalanjärvi.’



Pilots from 4/LLv 24 gather in front of Maj Magnusson’s FR-99 ‘Black 1’ at Joutseno in January 1940. They are, from left to right, Sgt Martti Alho, Danish volunteer 1Lt Fritz Rasmussen, 2Lt Tapani Harmaja and deputy flight leader 1Lt ‘Pelle’ Sovelius. Fritz Rasmussen was killed in action (in FR-81) by an I-16 from 25.IAP on 2 February (*J Sarvanto*)



Seen on 6 January 1940 sat in FR-97, 4/LLv 24's 1Lt Jorma 'Zamba' Sarvanto has good reason to be smiling, for he had just shot down six DB-3 bombers in four minutes south of Utti whilst flying this very fighter. Like most other Finnish aces, Sarvanto later saw action in Brewsters, scoring four victories to raise his final tally to 17 in 251 missions (*J Sarvanto*)

Some 21 engagements occurred during the course of the day, and aside from the SBs destroyed, two I-16s from both 7. and 64.IAP were shot down. Sgt Pentti Tilli, flying FR-103, accounted for the former pair and 1Lt Urho Nieminen and 2Lt Heikki Ilveskorpi the latter. A Soviet I-16 from 25.IAP did succeed in shooting down Sgt Tauno Kaarma, however, who was injured when FR-111 crash-landed at Lyykylänärvi.

The action continued on Christmas Day, when the Fokkers destroyed two SB bombers from 6.DBAP (Long-range Bomber Aviation Regiment) over the Karelian Isthmus.

The 25th also saw the 3rd Flight strengthened and redesignated Detachment Luukkanen, whereupon it was transferred to Värtsilä to support the troops on the northern coast of Lake Ladoga. Upon its arrival, the detachment immediately downed four SBs of 18.BAP, with 1Lt Jorma Karhunen in FR-112 and Sgt Toivo Vuorimaa in FR-93 claiming two apiece. On the 27th the Soviets lost three more SBs (from 2.SBAP) over the Karelian Isthmus, whilst WO 'Isä-Vikki' Pyötsiä downed two I-15bis fighters north

of Lake Ladoga in FR-110.

Immola was frequently a target for Soviet bombers at this stage in the war, so the headquarters, 1st and 4th Flights moved to Joutseno on 28 December, and then on to Utti four days later – by this stage in the conflict Finnish military intelligence had discovered that bomber crews navigated their way to targets in Finland by following the railway network.

On New Year's Eve, Sgt Ilmari Juutilainen (a member of Detachment Luukkanen, and future ranking Finnish ace with 94 kills), flying FR-106, shot a lone I-16 off the tail of 1Lt Karhunen during an engagement over the northern shore of Lake Ladoga. This was the unit's final kill of 1939.

LLv 24's pilots had scored steadily during their first month of operations, claiming 54 aircraft downed for just one D.XXI lost in combat and another Fokker fighter damaged.



Four pilots from LLv 24's 3rd Flight smile for the camera at Ruokolahti in late February 1940. Sitting on the D.XXI's wheel spat is flight leader Capt Eino Luukkanen, and standing next to him is MSgt Ilmari

Juutilainen. Sat on the wing are Sgts Jalo Dahl and Martti Alho (E Luukkanen)

By this time the similarly outnumbered Finnish ground forces had halted the Soviet advances along the 1000-mile frontline. The extremely cold winter, where temperatures often fell to -30° centigrade (and on several days plummeted to -40°C), favoured the Finnish defenders.

6 JANUARY 1940

During the morning of 6 January, 17 DB-3Ms of 6.DBAP took off in two waves from Estonia to bomb Kuopio, in eastern Finland. The first nine Ilyushins attacked their target as planned, but the second formation of eight drifted too far west and crossed the Gulf of Finland south of Utti. Based nearby was 4/LLv 24, which had 1Lt Sovelius (in FR-92) up on patrol. He attacked the DB-3Ms at 1010 hrs at a height of 3000 metres, downing the outer aircraft on the far left side of the formation.

The remaining seven bombers continued to Kuopio, where they released their bombs to little effect before returning home along the same route, which followed a railway line. 1Lt Sarvanto had, meanwhile, taken off in order meet the DB-3s on their return journey, and in his post-war memoirs, he described the famous four-minute battle which ensued;

‘The clouds over Utti had disappeared and the sun gleamed from the light bellies of the marvellous looking row of bombers. I counted them to be seven. On the left flew an echelon of three and to the right four almost in a row. The distance between the aeroplanes was hardly one aircraft.

‘I banked to the right and headed south, continuing to climb. For a moment I was in the sights of the nose gunners, but facing the sun, they obviously did not see me. When I reached the altitude of the bombers, I was already 500 metres behind them. At full power, I started the chase and selected the one at the extreme left of the formation, although the bomber third from the left was further behind the others, and the fire from its rear gunner felt dangerous. At a distance of 300 metres it banged unpleasantly into my aeroplane – I had flown into a stream of bullets.

‘I opened fire at 20 metres with a short burst to the fuselage of the machine on the left. The tracers seemed to hit the target, and I quickly silenced the bomber’s rear gunner. I took aim again at the right engines of both bombers in the formation, and with light touches on the trigger, both went down in flames. I cheered, and then aligned my Fokker up with the bombers on the opposite side of the formation. Attacking as I had before, I set the engines of one bomber alight, before turning to the next aircraft in the formation, hitting it with gun fire at very close range. This

aeroplane also burst into flames soon after I had hit it with two or three very short bursts. I then saw the first aircraft that I had attacked on the right side of the formation diving as a fireball towards the ground.

‘I now set myself the goal of destroying all the remaining bombers in the formation. Some fell away like burning pages of a book after I had fired at them, whilst others pulled up steeply following the incapacitation of their pilot. The reddish January sun shone through the haze towards me throughout the engagement, except when the dark smoke of the burning aeroplanes cast a shadow across it.

‘The penultimate bomber was much tougher than the others to shoot down, for my wing guns were probably empty by then. It did, however, finally catch fire, and I in turn went after the last one. Its rear gunner had been silent for quite some time, and I went in very close. I aimed at the engine and pulled the trigger. The guns were quiet! I made a couple of charging attempts but without any result. I had run out of ammunition, and the only thing to do was to return home.’

The sole surviving DB-3 was chased down by 1Lt Sovelius, who had landed and had his fighter refuelled and rearmed since intercepting the bombers on the way to the target. He caught the fleeing Ilyushin as it flew out over the Gulf of Finland, sending it down in flames.

Sarvanto returned to base to be credited with the destruction of the remaining six DB-3s in the formation, for all of them had crashed between Utti and Tavastila – a distance of 30 kms. He thus became Finland’s premier ace in an action that lasted just four minutes. His D.XXI (FR-97) had received 23 hits during the engagement, but none were serious, and it was flown to the repair facility. Once news of the action was released, foreign pressmen showed much interest in Jorma Sarvanto, for nothing like this had occurred in Europe up to this point in the war.



Air- and groundcrews from Detachment Luukkanen gather at Värtsilä on Christmas Eve 1939. They are, from left to right, an unnamed assistant mechanic, an unnamed armourer, mechanic P Hannula, mechanic J Paajanen, Sgt I Juutilainen, assistant mechanic T Karhu, SSgt P Tilli, mechanic P Heino, 1Lt T Huhanantti, mechanic V Eve, flight leader 1Lt E Luukkanen, mechanic U Raunio, 1Lt J Karhunen, assistant mechanic K Pyötsiä and mechanic E Horppu. Both Pentti Tilli and Tatu Huhanantti fell victim to I-16s during the Winter War (E Luukkanen)

On 7 January heavy snow began to fall throughout the region, preventing virtually all flying on both sides of the front for over a week. Taking advantage of the conditions, the 1st and 4th Flights returned to Joutseno.

Ten days later, on the 17th, ten D.XXIs that had scrambled at 1355 hrs caught three formations of SBs (totalling 25 aircraft) from 54.SBAP returning from a raid via the Karelian Isthmus. Forty minutes later, nine bombers had met their end and several more were damaged – amongst the victorious pilots was 1Lt Urho Nieminen, who claimed two in FR-98.

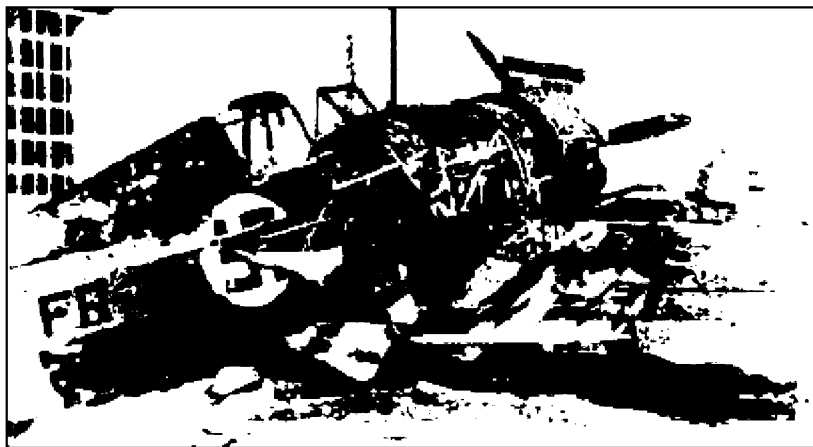
On the 19th Nieminen, now in FR-78, and SSgt Virta, flying FR-84, each became aces when they downed an SB bomber apiece over the Karelian Isthmus. Following these reversals, Soviet bombers avoided the airspace over south-eastern Finland for almost two weeks.

However, in other areas along the massive frontline Soviet bombers continued to venture forth. Indeed, 24 hours after Nieminen and Virta had ‘made ace’, Detachment Luukkanen engaged SBs of 21.DBAP north of Lake Ladoga, attacking the bombers as they crossed the Finnish frontline, and then again as they departed the target. Five were destroyed, WO Viktor Pyötsiä (in FR-110) claiming two and SSgt Pentti Tilli (in FR-107) one – both duly became aces. However, their luck then swiftly changed as two I-16s (almost certainly from 49.IAP) belatedly appeared on the scene to chase the D.XXIs off, and Tilli was shot down and killed.

That same day 1Lt Tatu Huhanantti took off from Tampere in FR-91, which had just been repaired at the State Aircraft Factory. On his way back to base he encountered three SB bombers of 36.SBAP, quickly shooting down two of them before the five escorting I-153s could interfere. The wrecks were easily found as the aeroplanes had come down 60 kms north of Helsinki near a main railway line.



The excuse for a gathering on this occasion was that it was New Year's Day! Standing, from left to right, are WO Yrjö Turkka, Sgt Lasse Heikinaro, 1Lt Jorma Sarvanto and Danish volunteer 1Lt Erhard Frijs. Seated, from left to right, are Sgt Risto Heiramo, Sgt Eero Kinnunen and Sgt Tauno Kaarma. Visible in the distance is FR-112 'Black 7', which was usually flown by 1Lt 'Joppe' Karhunen (J Sarvanto)



3/LLv 24's FR-76 was so badly damaged in combat on 5 March 1940 that Sgt Mauno Fräntilä was forced to land between the Finnish and Soviet frontlines at Virolahti, on the north shore of the Gulf of Viipuri. The wounded pilot succeeded in making it back to friendly territory, whilst his aircraft became the target for Finnish mortar fire. Despite suffering further damage, LLv 24's oldest D.XXI (see the photograph on

page 8) was successfully salvaged by the Red Army and put on display in Leningrad soon after the cessation of hostilities (via P Manninen)

Although up until now the Soviet fighters had shot down just two D.XXIs, there had been a number of close calls when pilots had attempted to engage the Polikarpovs despite Maj Magnusson's order forbidding such acts. In an effort to further discourage these dogfights from taking place, on 28 January *Lentorykmentti 2* commander, Lt Col Lorentz, issued a ban on searching out and engaging enemy fighters for combat. Only bombers were to be attacked, for the D.XXI was no match for the more manoeuvrable I-153s and I-16s.

On 29 January Red Army artillery commenced shelling Finnish positions on the Karelian Isthmus with the aid of Polikarpov R-5 fire control aircraft. The local army commander duly contacted his counterpart in *Lentorykmentti 2* and requested that fighters be scrambled to put a stop to the deadly accurate barrage. 1Lt Jorma Karhunen was given this task;

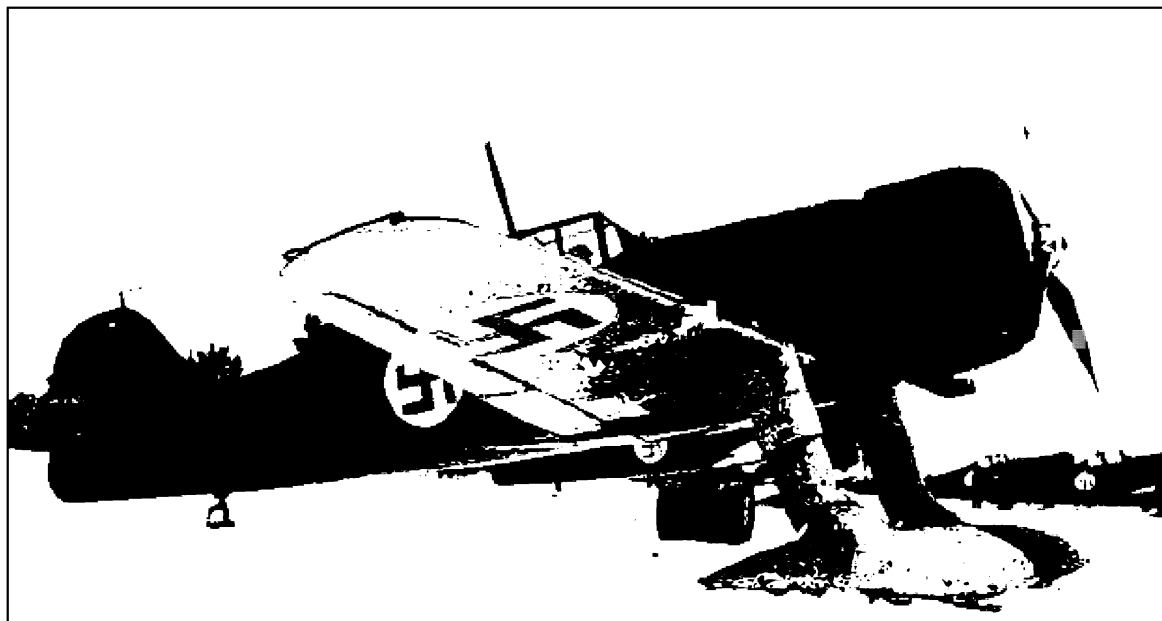
'At 1455 hrs I got an order to take off with three other Fokkers and head to Summa, where we were to either drive away or destroy two artillery fire control R-5s. Five minutes later the swarm sped across the ice and took off. My wingman, WO Yrjö Turkka, and I formed the lead pair, with 2Lt Olli Mustonen and Sgt Tauno Kaarma just astern of us.

'I had quickly devised a battleplan, which had to be foolproof, for we knew that the R-5s would be called off at the merest hint that we had been scrambled. We also knew that once we had left the frontline they would pop up again. I therefore decided to fool their ground-based spotters by flying along the west coast of Viipurinlahti just above the cloud line, which was at 2000 metres.

'We continued south, and at Koivisto we turned towards Summa. I then led the swarm into the clouds, before pulling my FR-80 abruptly out as we approached Summa – I needed to make sure that the "patients" were still there. I soon spotted the R-5s as they lazily circled around relaying instructions to the artillery, although they were still some way away, so I quickly flew back into cloud. The next three minutes seemed to last forever as we closed on the enemy. Then we bounced them out of the clouds.

'One R-5 was conveniently below the lead pair as we burst out of the cloud, and 'Daddy' Turkka and I fired simultaneously at it. In seconds the aircraft's wings folded up as the fuselage burst into fire – the flaming ball of fire came down between the lines. Then we all fired at the second R-5, and it crashed behind the the Soviet frontline. Our job was done.

'We then managed to negotiate the enemy's ferocious anti-aircraft fire and return to base unscathed, which was a miracle in itself.'



Winter War survivor FR-116 of 5/LLv 24 is seen at Joroinen on 8 April 1940. Although barely visible on the original print of this photograph, there is a blue '4' painted on the fighter's rudder, denoting its allocation to the 5th Flight. Along with the 1st Flight, 5/LLv 24 was manned by pilots from LLv 26 until they returned to their original unit on 1 February 1940. And it was 'on loan' pilot 2Lt Kauko Linnamaa that had shared in the destruction of a DB-3M bomber on 21 December 1939 whilst flying FR-116

One of the Soviets' favourite targets during the Winter War was the State Aircraft Factory at Tampere. Indeed, it was so regularly bombed that a local defence flight was organised by its test pilots, and they were occasionally assisted by frontline pilots who found themselves caught up in the midst of a raid whilst picking up a repaired aircraft. 2Lt Olli Puhakka became embroiled in just such a situation on 29 January;

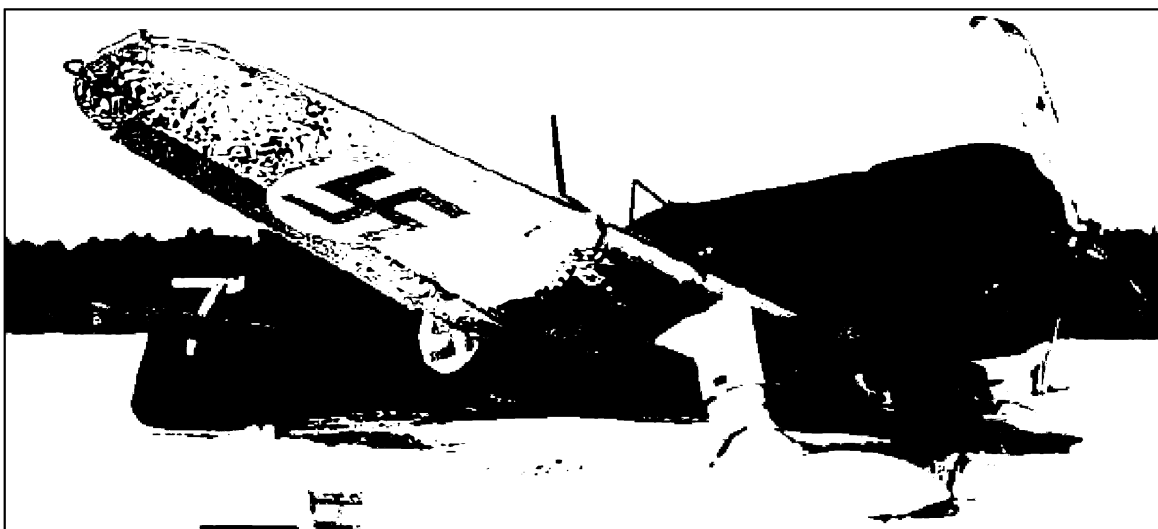
'Having just completed an interception, 1Lt Visapää and I were just about to land at Tampere when we observed a large twin-engined aircraft flying a transverse course to us. 1Lt Visapää was about 200 metres ahead of me, and almost directly above the runway when we spotted the bomber.

'My leader instantly fired at the aircraft, but I instead chose to close on it, leaving 1Lt Visapää behind me in a climbing turn. I was about 500-700 metres behind the enemy aeroplane, and as I gave chase I quickly realised that the distance between us was increasing rather than closing. In desperation I started to fire short bursts at the bomber, and the first one passed below it. However, the second cannon shell struck the aircraft near its port engine and the third burst hit the starboard wing.

‘I assumed that I had damaged one of its engines, for I instantly overhauled the bomber, but now my guns refused to work! All I could do was to carry out some diving passes on the aeroplane, and I left it between Lempäälä and Viiala. I thought that 1Lt Visapää would now attack it, but he had lost the bomber in cloud at the same time as I broke off my attack.

‘Luckily for me the bomber later crash-landed. I assumed that the entire action had been witnessed by 1Lts Itävuori and Visapää. Not knowing what had caused the aircraft to come down, I hoped that information from *T-LentoR 2* (*Täydennyslentorykmentti 2*, or Supplementary Flying Regiment 2, which was part of *LentoR 2*, in charge of advanced fighter combat training) would confirm whether its demise had been caused by cannon shells or machine gun bullets – the latter could also have been fired by 1Lt Visapää.

‘I was flying FR-76, which was equipped with a 20 mm cannon under each wing, although only one had worked. I used all 18 rounds in the drum. The fuselage machine guns had fired about 60-70 rounds when the synchronising gear broke down.’



Seen on page 13 forming the backdrop for the group shot of pilots from 4/LLv 24, FR-110 looks a little worse for wear in this 8 April 1940 view. Its port ski had fallen off whilst the fighter was in flight, so its pilot, 3/LLv 24's 2Lt Olli Mustonen, had to effect an emergency recovery at Joroinen. The second-highest scoring fighter of the Winter War, FR-110 had been used by WO Viktor Pyötsiä to claim all 7.5 victories credited to him – the fighter was coded 'Blue 7' at the time. It is the only D.XXI to have been photographed bearing victory markings, these taking the form of four-and-a-half vertical bars on the starboard side of the fighter's fin (visible just forward of the '7' on the Fokker's rudder)

The downed bomber was a DB-3M from 43.DBAP, its crew having been captured

following a forced-landing at Urjala. Upon examining the wreckage, *T/Lento R2* did indeed find several cannon holes in the wings, which gave Puhakka credit for the victory.

On 30 January LLv 24's 2nd Flight suffered a major blow when its leader, 1Lt 'Jaska' Vuorela (flying FR-78), crashed to his death in poor weather at Ruokolahti. 1Lt Leo Ahola duly assumed command of the unit, forming Detachment Ahola, and leaving 1Lt Jorma Karhunen to head the remainder of the 2nd Flight. LLv 24 was now down to just 28 serviceable D.XXIs, and ten of its 'hired' pilots from LLv 26 returned to their original unit at month-end following the arrival of 30 ex-British Gloster Gladiator IIs. January's score for the D.XXIs was 34 aircraft shot down.

TROOP ESCORT

By late January the Soviet fighters committed to the Winter War had become very aggressive, flying in regiment strength (30 to 40 aeroplanes) deep into Finland. Newly-introduced drop tanks also meant that bombers could now be escorted on most raids, and the pilots of LLv 24 found it increasingly difficult to claim further kills.

Following a standstill along the frontline throughout the first weeks of 1940, on 1 February 1940 the Soviet Union launched the second phase of its offensive to capture the Karelian Isthmus. Other fronts remained static as the communists committed virtually all of their ground and air forces to achieving a breakthrough in this strategically important area. The inland bomber offensive also immediately switched to supporting the infantry, and large fighter formations started patrolling over the battlefield.



8 April 1940 proved to be something of a chequered day for LLv 24, as FR-117 was also damaged in a landing accident at Joroinen when the 1st Flight's MSgt Lauri Rautakorpi slid the fighter into a camouflaged barn! 'White 8' was normally assigned to 2Lt Olli Puhakka, who had been 'loaned' to LLv 24 from LLv 26. Finland's sixth highest scoring ace of World War 2, Puhakka went on to score 42 victories and win the Mannerheim Cross (on 21 December 1944)

Fighting for its survival, the Finnish Army began a slow retreat a fortnight later, before finally halting the onslaught in front of Viipuri on 26 February. Throughout the offensive the D.XXI pilots concentrated on providing fighter protection for the troops in the frontline, and for replacements being sent into battle – LLv 24 flew up to 88 sorties a day.

With the increase in activity came further losses, and on 1 February I-16s from 7.IAP shot down and killed 2Lt Tapani Harmaja in FR-115. A similar fate befell Danish volunteer 1Lt Fritz Rasmussen the following day (in FR-81) when he was downed by I-16s from 25.IAP.

Within hours of the offensive being launched, Detachment Ahola flew to Turku, on the south-west coast, in order to protect this major port, and to prevent Soviet bombers from flying northward along the west coast.

On 3 February 1Lt 'Zamba' Sarvanto (in FR-80) claimed his tenth kill when he shot down a DB-3M of 51.DBAP at Nuijamaa, in south-eastern Finland. Later that same day, in the west, four D.XXIs bounced three DB-3s of 10.ABr (aviation brigade) and shot them all down into the Turku archipelago – 2Lt Pekka Kokko claimed two in FR-86. The following day another DB-3 was lost in the same area, and the Russians became alarmed, for they had not expected to find fighters so far west.

On 10 February the 4th Flight attacked a large bomber formation over Lappeenranta, but the equally numerous fighter escort of 7. and 25.IAP defended their charges well, shooting down MSgt Väinö Ikonen in FR-102 – he escaped with wounds. Big claims were now a thing of the past for the Fokker pilots, with the daily scores rarely bettering three bombers at most. Losses also continued to accumulate, and on 19 February a second Danish volunteer in 1Lt Erhard Frijs (in FR-80) was killed near Käkisalmi by I-16s of 25.IAP. One week later Sgt Tauno Kaarma escaped with injuries when I-16s of 68.OIAP downed his FR-85 at Immola.

February ended badly for the Finnish fighter arm when, on the 29th, Soviet fighters carried out a series of air raids on the airfields occupied by LLv 24 and 26. 49.IAP claimed a Gladiator of LLv 26 (assigned to LLv 24's Detachment Luukkanen, which had moved to Ruokolahti three weeks earlier) during a morning sweep, and then at noon a 'bomber' formation was detected approaching Ruokolahti. These aircraft turned out to be six I-153 'Chaikas' and 18 I-16 'Ratas' from 68.OIAP (O, in this instance, standing for detached), which took the Gladiator pilots by complete surprise as they took off. Three were immediately destroyed, and in the low-altitude combat which ensued, two more were lost, along with the D.XXI (FR-94) of 1Lt Tatu Huhanantti – all six pilots perished. Only one I-16 was downed in return, whilst another clipped some trees and crashed.



5/LLv 24 D.XXI FR-105 'White 5' is seen at Joroinen in April 1940. It was assigned to Sgt Eero Kinnunen at the time this photograph was taken, although he claimed all of his 3.5 Winter War kills in FR-109. FR-105 did enjoy success, however, whilst being flown by future aces Sgts Lasse Aaltonen and Onni Paronen (then both members of LLv 26). The fitment of skis in place of wheels on the D.XXI's fixed undercarriage legs had very little effect on the fighter's performance. On 19 April 1940 LLv 24 exchanged its surviving Fokker fighters for the Brewster Model 239s flown by LLv 32 (ex-LLv 22)

Despite increased opposition, LLv 24 had claimed 27 aircraft destroyed in February, although it was now down to just 22 serviceable D.XXIs.

FINAL ROUNDS

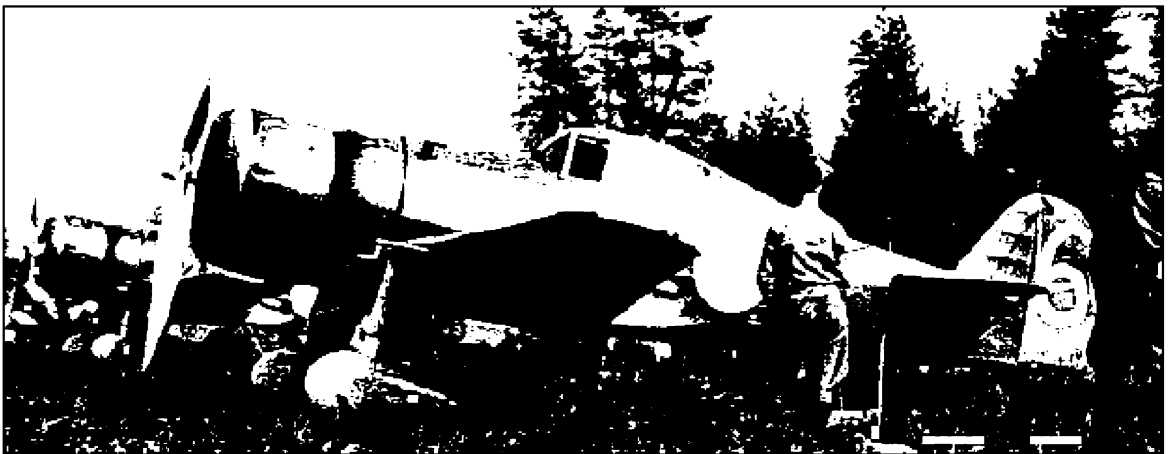
On 1 March 1940 unit moved its headquarters to Lemi, and within two days all five flights had followed suit.

Following the bitter fighting of February, the Finnish Army had finally withdrawn from the Karelian Isthmus by 1 March, although it remained steadfast in front of Viipuri. Sensing retreat, the Red Army started crossing the frozen Gulf of Finland west of Viipuri the following day.

Soviet forces had soon established two small bridgeheads on the mainland, and in order to prevent a full-scale invasion, the entire Finnish Air Force was sent into action against troops, tanks and supply columns crossing the ice. The aircrews went about their task with clinical precision, light and medium bombers stopping the motorised units in their tracks and fighters strafing the infantry. The Red Army was caught

totally exposed on the vast open spaces of the icefield, and within a week the invasion had been suppressed. This intensive operation also attracted Soviet fighters into the area, and Capt 'Eikka' Luukkanen, who lead several strafing missions during this time, describes one such sortie flown on 5 March;

'I broke radio silence and ordered the formation (of 15 Fokkers) out of the clouds. In an effort to confuse the enemy, we approached them from their direction. I banked to the left and led the formation into a dive. There seemed to be no lack of targets, with columns of cars, trucks and tanks filling the ice for the full four kilometres that separated Tuppuru from Vilaniemi. A squadron of I-16s was spotted circling above Uuras, and another fighter unit was observed on the other side of the gulf over Ristiniemi. I continued my shallow dive, knowing that the sooner we hit the targets on the ground the better. We were now only one kilometre away from the nearest vehicles, and the sky all around us was filled with explosions and tracers of anti-aircraft fire. Both white and black clouds of flak exploded nearby, immediately attracting enemy fighters.



Although now assigned to LLv 32, D.XXI FR-108 is seen here running up at Siikakangas in late May 1940 whilst still wearing the colours of its previous user, 3/LLv 24. 3rd Flight leader Capt Eino Luukkanen had flown this aircraft ('blue and white 6') during the Winter War, claiming one Soviet aircraft solely destroyed and another shared



Photographed between sorties at Siikakangas in June 1940, FR-92 was the mount of 4/LLv 24's deputy leader, 1Lt Per-Erik Sovelius. One of ten Winter War aces, he claimed all six of his victories with FR-92. The fighter still sports the tactical marking 'Black 5' favoured by 'Pelle' Sovelius

'My first burst of fire hit an infantry column, and next in my gunsight loomed a line of trucks, followed by two tanks. The bullets from our rifle-calibre guns did not seem to have any effect on the latter, with the tracer rounds visibly bouncing off their armour plating. Following my strafing run I looked back to see if the rest of the formation had followed my lead.

'Immediately after the attack we flew due west at low-level towards friendly territory, before banking to the north heading for our base. By following such a course, we prevented any aircraft that happened to be tailing us from finding our base.'

LLv 24 flew 154 assault sorties during the seven-day battle on the ice, claiming one I-16 shot down and losing Sgt Mauno Fräntilä (in FR-76) to fighters from 7.IAP fighters. Fräntilä, who had been on the strafing mission described by 'Eikka' Luukkanen, was wounded during the course of the mission and forced to crash-land between the lines at Virolahti. He managed to reach the Finnish frontline, but his badly damaged D.XXI was seized by the Red Army and displayed in Leningrad as a war trophy.

The situation on the Karelian Isthmus was still critical when peace negotiations commenced in Moscow on 8 March. The resistance of the Finnish forces, supported by material help from western nations who threatened to join in militarily if the invasion continued, convinced the USSR that further action would only see the war expand into

an international crisis, which they did not want. So, on 13 March at 1100 hrs a cease-fire commenced. Accordingly, but unjustifiably, Finland handed over those tracts of land that the Soviets had demanded back in late 1939.



Yet another ex-LLv 24 machine, FR-95 was photographed at Siikakangas in June 1940 whilst serving with LLv 32. This aircraft had been damaged in a landing accident early on in the Winter War, and after being repaired, it was issued to 4/LLv 24's MSgt Lasse Heikinaro on 3 February 1940. He went on to claim three victories with it prior to the ceasefire coming into effect. 'Black 6' remains painted in the colours it wore during the recent conflict. In September 1940 LLv 32 at last introduced its own tactical numbering system (*U Nurmi*)



Well-known Finnish company Nokia Oy donated sufficient funds for the air force to purchase Brewster Model 239 BW-355. In return the aircraft was adorned with the inscription NOKA. One of the first examples of the American fighter to arrive in Finland, it is seen at Hollola in late March 1940 whilst assigned to LLv 22. On 18 April BW-355 was transferred to LLv 24, and the aeroplane continued to carry this name through to its destruction on 24 October 1944

When the Winter War commenced LLv 24 had 35 serviceable D.XXIs on strength, and