# THE WINTER WAR

n the last day of November 1939 the Soviet Union launched its land, sea and air offensive against Finland. The main front was at the Karelian Isthmus, where the Soviet 7th Army force of more than ten divisions attacked five Finnish divisions. Between Lake Ladoga and Porajärvi the 8th Army was opposed by two divisions of Finnish troops. Further north, in the directions of Kantalahti and Uhtua, the 9th Army attacked, while the 14th Army advanced from Murmansk. In these regions the Finns could muster only detached battalions – three opposing the 9th Army and another three the 14th Army. The Red Banner Baltic Fleet, the Lake Ladoga Naval Detachment and the Arctic Fleet protected the flanks of the Soviet armies.

At the beginning of this conflict, which became known worldwide as the Winter War, the Soviets had 2318 aircraft concentrated on the Finnish front, while the *Ilmavoimat* could muster only 114 aircraft, of which 45 were fighters. Of these, just 35 were reasonably modern Fokker D.XXIs (see *Osprey Aircraft of the Aces 112 – Fokker D.XXI Aces of World War 2* for further details).

The war ended in the peace treaty of Moscow on 13 March 1940. Although Finland had lost huge areas of land by then, it remained unconquered and independent. By the end the conflict the Soviets possessed 3818 aircraft and the Finns 166, 100 of these being fighters.

Immediately after fighting had broken out on 30 November 1939, the Finnish purchasing commissions frantically went in search of combat aircraft, like many other nations at that time. Military materiel became harder to obtain, and prices escalated. Finland's position was becoming more and more alarming under the threat of the Soviet Union, and instructions were issued to buy any fighter aircraft that could be found. Authorised by the Finnish government, ambassadors in Britain and France approached those countries' respective governments for any kind of war materiel, especially aircraft that could quickly be made operational.

In Britain the Air Ministry had already agreed on 5 December 1939 to supply second-line aircraft to Finland, and a week later the first contract was signed between the Gloster Aircraft Company and the Finnish government. In this way the British government avoided a potential political confrontation with the Soviet Union. Finland did not care how the deals were made. Much more important was the availability of aircraft and other equipment. Similar contracts with other aircraft manufacturers were soon to follow.

France was not so particular about its political image, and the French military attaché in Helsinki received a telegram on 28 December 1939 informing him that the French government had initially decided to donate 50 fighters to Finland, in addition to airfield equipment, spares, coolants and 1.35 million rounds of ammunition. The list was later expanded following the addition of 80 Caudron-Renault CR.714 and 46 Koolhoven FK.58 fighters and 62 Potez 633 bombers.

Shortly after the Winter War had ended Prime Minister Edouard Daladier informed the French Parliament that the nation had donated 145 aircraft and plenty of other war materiel to Finland. In fact only 36 aircraft ever arrived.

Of the 50 promised MS.406 fighters, only 30 were drawn from Air Depot 304, packed in crates and shipped from 10 January 1940 onwards to Malmö, Sweden, for assembly. On 17 January Cne Raoul Etienne's group of seven Frenchmen (six technicians and a test pilot) arrived at the Aerotransport facilities at Malmö. At the same time the crated aircraft began reaching Sweden. On 19 January assembly commenced, and the first Morane was ready for delivery ten days later.

In addition to covered national insignia, the *Ilmavoimat* serials MS301 to MS330 inclusive (now without the dash) were applied, both on the rear fuselage and under the wings, and sometimes also on the wing uppersurfaces. The Moranes were then flown to Västerås, in central Sweden, for collection by Finnish pilots. The first two departed for Finland on 4 February 1940, and all 30 were picked up in lots of two to five aircraft by the end of the month.

#### - New Squadron

Lentolaivue (LLv) 28 was established on 8 December 1939, with Maj Niilo Jusu in command. The flight leaders were Capt Sven-Erik Sirén (1st), 1Lt Reino Turkki (2nd) and Capt Eino Jutila (3rd). Based at Säkylä in southwestern Finland, the squadron was tasked with the protection of vital ports in this area. The unit began building up in strength prior to the arrival of new fighters in Finland, which three weeks later were known to be MS.406s donated by France.

On 2 February the first two Moranes arrived at the squadron's base, and by the end of the month all 30 had been received. At this point the MS.406s were armed with only three 7.5 mm machine guns, as the engine-mounted 20 mm cannon did not reach LLv 28 for a further three months.

Wasting no time, the unit performed its first combat mission from Säkylä on 6 February 1940, flying in the defence of Turku and other southwestern ports. Eleven days later the Morane pilots drew first blood, sending a bomber down over the southwestern archipelago. Future ace 1Lt Tuomo Hyrkki and his wingman had intercepted nine Ilyushin DB-3 bombers over Pori, and Hyrkki, flying MS301, repeatedly attacked the leftmost aeroplane. He finally caused it to emit smoke, and it went down on the ice south of the Utö Lighthouse. He also silenced the dorsal gunners of two other bombers. Hyrkki's victim had belonged to 53rd DBAP (Long-Range Bomber Aviation Regiment), which confirmed the loss.

At 1100 hrs, on 20 February, the Moranes shot down two of six Tupolev SB bombers approaching the port of Rauma. 1Lts Reino Turkki and Mikko Linkola claimed the left wingmen of both three-aircraft formations, the bombers crashing in flames on the ice outside Rauma. Three hours later, future ace 1Lt Veikko Karu, flying MS321, chased nine DB-3s of 53rd DBAP towards Estonia. He caught up with the formation just as they reached the Estonian coast, sending two of them down. This engagement had been a real test of Karu's physical endurance since the chase had taken place at an altitude of 7000 m (23,000 ft), and the Finn had no oxygen mask, thus making it very difficult for him to breathe in



MS.406 MS318 of 2/LLv 28 at Säkylä, in southwestern Finland, in early March 1940. Its tactical number on the fin is a yellow 3. The silver-coloured star on the rudder denoted future ace 2Lt Pauli Massinen's victory over a DB-3 bomber on 2 March. In front of the aeroplane are French mechanics Decousser and Levard (*Pauli Massinen*)

the rarefied air. Such tenacity would win Karu the Mannerheim Cross (Finland's highest award for bravery in action) 18 months later.

By March, when the Soviet advance had seemed to halt at the Finnish Army's rearmost defensive line on the Karelian Isthmus, southeast of Viipuri (Vyborg), the Red Armies decided to attack the rear of the defences by crossing the frozen Gulf of Vyborg. Along other sections of the frontline the Soviet advance had ended earlier, and north of Lake Ladoga communist troops, facing slow starvation, fiercely defended their encircled positions. The Soviets tried to advance to the rear of the Finns to help break the encirclements, but these efforts failed.

On 2 March LLv 28 claimed three bombers in southwestern Finland, and in a chase towards Estonia a Polikarpov I-153 fighter was also caught and shot down. Future aces 2Lt Pauli Massinen in MS318 and Cpl Urho Lehtovaara in MS326 both claimed their first kills on this date.

The Soviets had observed the presence of new fighters in southwestern Finland, with units of the Baltic Fleet air forces claiming to have destroyed six Brewster Buffaloes in the Turku area on 2 March. Both the type and numbers were pure fiction, as the Finns did not lose a single aeroplane on that date, and the Brewsters had not yet arrived in-theatre in any case. The new aeroplanes encountered by the Soviet aviators were Moranes, which two days later were misidentified as Spitfires. But knowledge of the Brewsters' imminent delivery to the *Ilmavoimat* meant that the Soviets had spies in Sweden monitoring what was going on in assembly plants or at transit airfields in the neutral country.

On 4 March Soviet troops managed to cross the Gulf of Vyborg and form a bridgehead near Finnish territory. Troops and columns flowed across the ice, and all *Ilmavoimat* units were thrown into action against this serious threat. By 7 March the situation had become critical, and two flights of Moranes from LLv 28 were transferred to Hollola, closer to the front on the Karelian Isthmus. They immediately joined in the strafing attacks over the Gulf of Vyborg. Three days later the advance on the ice had been blunted owing to heavy losses caused by the combined efforts of Finnish strafing missions and coastal artillery.



The last combats were fought over southern Finland on 11 March, when Soviet fighter formations numbering as many as 200 aircraft were observed. For its last victories of the Winter War LLv 28 claimed three DB-3s from 7th DBAP, with future aces 2Lts Martti Inehmo and Aarre Linnamaa opening their scores.

At 1100 hrs on 13 March the Winter War ended with the peace negotiated in Moscow. LLv 28 had flown 288 sorties with its MS.406s, claiming 14 aerial victories and losing one aircraft, but no pilots.

The Soviet units had flown 100,970 sorties, claiming 427 aerial victories for the loss of 261 aircraft according to official records from 1939-40. The losses have since been adjusted by modern research to 388 aircraft – 188 fighters, 146 bombers and 54 aircraft of the Baltic Fleet air forces. By comparison, the *Ilmavoimat* had flown 5693 sorties, claimed 207 aircraft destroyed and lost 53 warplanes on operations. Finnish anti-aircraft guns had been credited with a further 314 Soviet aircraft.

# More Moranes -

After the German occupation of France in late June 1940, the Finns commenced negotiations with the German authorities to buy war-booty materiel, including captured aircraft. On 1 October 1940 a contract was duly signed between the Finnish and German governments. It included sale of war-booty to Finland in return for the transit of German troops and supplies via Finland to northern Norway, which the Wehrmacht had occupied in the spring of 1940.

Under this agreement ten captured MS.406s were bought. Having arrived in crates by 4 January 1941, they were assembled and overhauled by the State Aircraft Factory and received the codes MS-601 to MS-610.

On 13 March 1940 – the last day of the Winter War – MS305 of 3/LLv 28 takes off from Pyhäniemi ice airstrip at Hollola. The latter was used as a base from which strafing missions against Russian troops crossing the frozen Viipurinlahti (Gulf of Vyborg) could be generated. 3/LLv 28 applied white tactical numbers to the fins of its MS.406s (SA-kuva)

MS329 of LLv 28 at Naarajärvi in the spring of 1941. The tactical numbers wom by the unit's MS.406s were changed with the Continuation War mobilisation of 17 June 1941, this particular fighter being marked with a yellow 1. It was in this guise that the aircraft was flown by future 6.5-victory ace Cpl Toivo Tomminen of 3/LLv 28 in the latter half of 1941. Indeed, he claimed the last of his kills (a Hurricane) in MS329 on 4 December 1941 (Finnish War Museum)



The first Morane victory (an SB bomber) of the Continuation War was claimed by Sgt Antti Tani of 1/LLv 28 on 25 June 1941, flying his assigned aircraft, MS311. The fighter is seen here at Lunkula in September 1941 with its mechanics, R Tuomela and U Alanen. The last victory marked on the MS.406's fin is dated 23 August 1941 (Author's collection)



By the end of 1941 another 15 aircraft had been obtained. The first three arrived in June, seven more were received in August and the remainder in November, their serials being MS-611 to MS-625 inclusive.

#### - Bomber Offensive -

Operation *Barbarossa*, the German invasion of the Soviet Union (decided upon in December 1940), was planned to begin after the spring thaw. A delay was caused by the occupation of Yugoslavia and the Balkans, so the start of *Barbarossa* was postponed to 22 June 1941. By this time the Germans had by various means persuaded Hungary, Rumania and Finland to side with them, as they had borders with the Soviet Union or close to it. The operation was revealed to Finnish military leaders only four weeks before its launch. Following receipt of this information, Finnish forces were mobilised on 17 June 1941.

Just before the offensive commenced large numbers of German aircraft were based on airfields in southern Finland, carrying out missions such as reconnaissance and channel mining. Soviet Intelligence quickly discovered their presence on Finnish airfields, and the Russians assumed that these bases would also be used for major attacks on Leningrad. They therefore decided to attack these airfields first, and drew up a plan for a six-day offensive bombardment.

The key assets involved in these raids would be aircraft from the Leningrad Military District, parts of the Baltic Military District and the Northern and Baltic Fleets, which, combined, had 2503 warplanes at their disposal from the Arctic Sea to the Baltic Sea. Some 933 of these aircraft were bombers and 1327 were fighters. In addition, a further 202 longrange bombers were held in the rear. The operational border between Germany and Finland ran along the Oulu-Kajaani-Belomorsk line, and south of it half of the communist force could be directed against Finland.

Soviet air raids began early in the morning of 25 June 1941. During the course of the day the Russians flew 263 bomber and 224 fighter sorties, attacking several locations in southern and southwestern Finland, including airfields and purely civilian targets. After these bombardments the parliament considered Finland to be in a state of war with the communists and declared war on the Soviet Union. Thus the Continuation War began.

LLv 28, assigned to *Lentorykmentti* (LeR) 2, was then based at Naarajärvi and commanded by Capt Sven-Erik Sirén. It had 27 serviceable Moranes in three flights, led by Capt Timo Tanskanen (1st) and 1Lts Reino Turkki (2nd) and Erkki Lupari (3rd). The unit's task at this point was to protect the mobilisation of the field army in southeastern Finland.

On 25 June large bomber formations were first seen entering the airspace of southern Finland from observation posts in Turku at 0600 hrs. The Soviet targets in southeastern Finland were the airfields at Joensuu and Joroinen. Although LLv 28 was based away from these sites, the 1st Flight patrol met a lone,

apparently disoriented, SB bomber of 10th SBAP (Fast Bomber Aviation Regiment) and shot it down at 1300 hrs. Future ace Sgt Antti Tani described his first kill thus;

'I observed the enemy aeroplane at 1800 m [5900 ft] altitude over Rantasalmi, about 15 km [nine miles] west of the railway, flying in the direction of 135 degrees. Right after seeing the aircraft I banked after it. When I got to within 50-75 metres [55-80 yds] of it I opened fire from right behind, aiming on a line from the dorsal gunner to the

port engine. Immediately after firing the engine burst into flames, but not for long, leaving only a thick smoke trail from the engine. I fired another three bursts without additional effect. Cpl Pauli Lehtonen saw the aeroplane come down. My aeroplane was MS311.'

The *Ilmavoimat* fighters downed 26 Soviet bombers on the first day (23 later admitted by the Soviets), which was a promising start for the Continuation War. However, these attacks had highlighted major gaps in the Finnish air-surveillance and fighter-control systems. Although 121 fighters were ready to intercept, only one fifth of them could be directed to deal with the enemy. The weak spots in the system were quickly detected and put into sound working order.

The Soviet bombing offensive against Finland lasted six days (from 25 to 30 June), during which time Finnish and German air bases were attacked on 39 occasions with a total of 992 aircraft. Bomber crews claimed the destruction of 130 Axis aircraft on the ground and in the air. The Luftwaffe suffered no losses, however, as its aircraft had already left these airfields. Finnish losses were two slightly damaged aircraft. On the other hand, fighter pilots from the *Ilmavoimat* claimed to have shot down 34 Russian bombers during the same period.

After this offensive the Soviets transferred most of the units stationed on the Finnish front south to repel the rapid German advance. On the Finnish sector, after the regrouping, the communists had the 23rd Army on the Karelian Isthmus and the 7th Army north of Lake Ladoga, with responsibility for the front up to Uhtua in the direction of the White Sea. The air forces of the 23rd Army consisted of 5th SAD (Combined Aviation Division) with two fighter and two assault regiments –7th and 153rd IAPs (Fighter Aviation Regiments) and 65th and 235th ShAPs (Ground-attack Aviation Regiments). In August 1941 65th ShAP was transferred to the 7th Army air forces. The latter controlled 55th SAD with one bomber and four fighter regiments (72nd SBAP and 155th, 179th, 197th and 415th IAPs, plus 65th ShAP from August 1941 onwards).

On 3 July the pilot of a Morane from 2/LLv 28 fired all of his ammunition into one DB-3 bomber, sending it down. Sgt Urho Lehtovaara submitted two combat reports following this encounter. Here is the latter one, after the wreck of the aircraft had been found three weeks later;



Moranes of 3/LLv 28 at Naarajärvi, in southeastern Finland, on 28 June 1941. Aircraft MS-603 was flown by future five-kill ace 1Lt Jouko Myllymäki, who would claim his second victory (an SB bomber) in it on 26 September 1941. Behind the Morane are MS318 and MS-325. The latter was the mount of future 6.5-victory ace Sgt Toivo Tomminen. The tail numbers on these machines were applied in yellow, often with a thin red outline (SA-kuva)



2/LLv 28's MS-602 undergoes gun harmonisation at Joensuu in July 1941. This was the first assigned aeroplane of future eight-victory MS.406 ace 2Lt Martti Inehmo. On 9 July its fin was adorned with a victory bar denoting Inehmo's first Continuation War kill, over a MiG-3. On 8 August MS-602 was damaged when it hit a camouflaged barn at Joensuu (*Pauli Massinen*)

'Flying at 3000 metres [9800 ft], I observed at 1135 hrs three aircraft bombing Joensuu airfield. I signalled the lead aeroplane (1Lt Massinen) and instantly commenced the chase. After seven minutes I caught up with the enemy bombers and began firing at the aircraft on the right wing [of the formation]. The gunner of the middle aeroplane fired at me all the time, and for safety reasons I put a burst into him, silencing the position.

'I continued to fire at the original target, putting all my ammunition into it, then the starboard undercarriage fell down. Mechanic Nisula confirmed the similarity of the damage in the wreck, which was found east of Ilomantsi. My aeroplane was MS327.'

On 9 July 1Lt Pauli Massinen's swarm of 2/LLv 28 fighters was engaged in a combat at Räisälä with five MiG-3 fighters, shooting two down. On the return flight five SB bombers were observed and two were destroyed, in spite of interference by the escort fighters. Sgt Lehtovaara claimed a triple between 1440 hrs and 1500 hrs;

'After observing five enemy fighters I signalled my lead aircraft and dived instantly towards the enemy fighter. I entered immediately into a turning battle and after five minutes got a burst to hit the enemy fighter, which instantly dived to the ground, catching fire. After breaking off I flew towards Elisenvaara, one enemy fighter following me. After arriving at Lumivaara I observed five enemy SB bombers, which flew in a tight echelon straight to the west. I attacked the wing aircraft on the right flank and shot at its starboard engine, which immediately caught fire, and the bomber crashed into the ground.

'The enemy fighter that was following me fired at me all the time and pulled over me, banking to the right. After noticing that I was being left alone for a while, I moved again behind the wingman of the right flank of the bomber formation and fired a short burst into its fuselage and next to the starboard engine, which caught fire. The aeroplane dived in flames into the forest.

'The remaining three bombers then changed to a northeasterly course.

'The enemy fighter followed me up to Elisenvaara, where it turned to the south. I could not participate in combat since I had run out of machine gun ammunition. The I-17 (MiG-3) was faster than my aeroplane, but less manoeuvrable, being armed with heavy machine guns or cannons.

'My aeroplane was MS327.'

### FINNISH ADVANCE

On 10 July the Karelian Army offensive commenced from the Kitee-Ilomatsi area towards the northwestern coast of Lake Ladoga. The CO of LeR 2 specified that the operational areas for LLv 24 and LLv 28 were Saarivaara-Korpijärvi-Kolosenjärvi-Mannervaara-Tohmajärvi-Pälkjärvi-Kakunvaara-Kaurila-Matkaselkä. The two units were to take it in turns to maintain air superiority in these areas.

On 16 July the VI Army Corps of the Karelian Army arrived at the northern tip of Lake Ladoga and continued along the coast to the southeast. The following day 1Lt Aarne Nissinen's pair of 3rd Flight machines surprised two MiG-3s in the Elisenvaara area. One escaped but the other fighter was shot down. Later that same day 1Lt Reino Turkki's swarm of 2nd Flight aircraft were patrolling over Jänisjärvi when they engaged three fighters escorting two DB-3 bombers. While two MS.406s occupied the fighters, the other pair shot down both bombers. One of the pilots to achieve success was future ace 1Lt Pauli Massinen, who claimed his first victory of the Continuation War.

The VII Army Corps of the Karelian Army reached Säämäjärvi – its intermediate target – on 23 July, at which point Commander-in-Chief (C-in-C) Marshal Gustaf Mannerheim called the advance to a halt. The next day the VI Army Corps of the Karelian Army reached its intermediate target of the Tuulosjoki line by Lake Ladoga, and stopped.

That same day, during a reconnaissance mission to Kuusjärvi, 2/LLv 28, led by 1Lt Reino Turkki, engaged three SB bombers of 72nd SBAP. Two were shot down by Sgt Lehtovaara, who recalled;

'When returning from Mangna at 1915 hrs, flying at 2000 m [6500 ft], we met three DB-3 bombers. I attacked the right wing aeroplane and, after firing one burst, it instantly caught fire and crashed.

'The centre aeroplane, with the undercarriage partly down, was shot at by somebody else without any results. When the attacker pulled away behind the middle aeroplane, I immediately moved behind it and fired a burst, and I observed my cannon shells explode behind the starboard engine and fuselage. The aircraft went into a slide and bellied in on a field. Judging by the rate of fire, the dorsal gunner in the second bomber had a heavy-calibre machine gun or cannon.

'My aeroplane was MS314.'

On 12 August a swarm of 1/LLv 28 was engaged in combat over Vieljärvi with six Polikarpov I-15s. One was shot down by 2Lt Linnamaa

and another fell after a mid-air collision. This was an I-15bis piloted by Lt V P Gordjun of 65th ShAP, who bailed out. All of the Moranes returned to their base, but MS-301, flown by MSgt Jorma Norola, suffered a smashed starboard wingtip.

Five days later 1Lt Reino Turkki's swarm from 2/LLv 28 was patrolling the Lahdenpohja area when it engaged two I-16s, one of which was shot down by Lehtovaara. The swarm then headed to Lake Ladoga, where two Beriev MBR-2 flying boats were seen taking off in the shelter of Soviet warships. The Moranes remained circling further off until the flying boats had cleared the protection

Pilots of 1/LLv 28 at Läskelä forward landing ground in August 1941. They are, from left to right, SSgt Antti Tani, 2Lt Aarre Linnamaa, 1Lt Aarne Alitalo and MSgt Jaakko Norola. Tani and Linnamaa became aces early the following year, while Norola switched to flying bombers after claiming two victories. Alitalo was the father figure of the squadron (SA-kuva)



MS-601 of 3/LLv 28 on the sandy beach at Joensuu in July 1941. Flak brought this aircraft down on 10 August 1941, killing the assigned pilot, 2Lt Reino Ilmonen. Its tactical number was a yellow 0 simply because the standard practice dictated that the tenth aircraft of the flight was so marked (Finnish Air Force Museum)

MS314 of 2/LLv 28 was photographed at the Karkunranta shore base at Lake Ladoga in September 1941. Its regular pilot was MS.406 ace 1Lt Pauli Massinen, who claimed his first victory in the Winter War. He raised his final tally to five in this very machine on 21 August 1941 when he downed an SB. The aircraft in Massinen's flight had red spinners and white tail numbers (Pauli Massinen)

1Lt Pauli Massinen, deputy leader of 2/LLv 28, checks the instruments in the cockpit of his Morane prior to flying his next mission. Massinen's final score of five included four bombers and one flying boat. Having served as an instructor before the Continuation War, Massinen reverted to this role after completing a tour with 2/LLv 28 on 7 November 1941 (Pauli Massinen)





of the naval vessels, after which the swarm attacked and downed them both in flames.

On 20 August 1Lt Reino Valli's reconnaissance swarm of 3/LLv 28 engaged five I-153 *Chaikas* over Rantalahti. In the ensuing combat the Russians had two aircraft shot down, one by Sgt Toivo Tomminen flying MS318.

The following day, over Maaselkä, a swarm from 2/LLv 28 attacked six SB bombers escorted by two I-16s. One of the Tupolevs was destroyed by 1Lt Massinen. Several hours later Capt Urho Nieminen of 3/LLv 26, flying a Buffalo, led a three-aircraft Morane patrol of 1/LLv 28 to Suojärvi, where nine I-15bis were striking Finnish positions. The Finns attacked and the strength of the Russian detachment was decreased by two. The remaining Soviet fighters were then engaged in combat by a pair of 2/LLv 28 aircraft that had appeared on the scene, and the Russians lost one more aircraft.

No more victories were claimed by the Morane unit until 2 September, when 1Lt Tuomo Hyrkki's swarm from 1/LLv 28 flew to Säämäjärvi to protect ground forces. When six I-16s appeared on the scene, the Finnish pilots quickly despatched three of them, Hyrkki reporting;

'On patrol between 1345 hrs and 1520 hrs. When the swarm attacked five I-16s from ahead and above via a half-roll, one fled straight to the east. The I-16 pilot pulled up and turned every now and then, and we fired simultaneously. I caused the engine to smoke, and the aeroplane made a forced landing in a swamp north of Suojujoki. The combat occurred at 50-300 m [160-980 ft] and the I-16 tried to flee at low level. The pilot made a safe forced landing.





'My aeroplane was MS-607."

On 3 September the Karelian Army began the advance from Tuulosjoki towards the River Svir, reaching its objective on the morning of 7 September. In the south the Germans advanced to the southern tip of Lake Ladoga, besieging Leningrad.

Two days later a Morane swarm from 2/LLv 28 engaged nine *Chaikas* and nine I-16bis of 155th IAP during a combat air patrol to the River Svir, shooting six of them down. On the return leg of the mission the detachment encountered an eight-aeroplane mixed formation and destroyed an I-153. SSgt Urho Lehtovaara described his triple claim from the sortie;

'After arriving at the specified area, led by 2Lt Inehmo, we encountered

at 1000 hrs nine I-153 and nine I-16bis fighters. Two I-16bis attacked the rearmost pair of the swarm, firing from straight behind. I made an attack from straight ahead against these two, shooting from ahead at the aircraft on the left, which took hits in its engine, made a rapid pull-up and went down in a shallow dive and disappeared with the engine smoking badly. I immediately shot at another I-16bis from straight ahead – it was hit by a long burst and crashed directly into the ground.

'Behind these aeroplanes there was still a threefighter patrol, which I engaged in a turning fight and managed to shoot at one that was banking, and which crashed at high speed into the forest. One of the remaining aircraft went down to the deck and broke off the fight, and the other pulled into the clouds.

'My aeroplane was MS-304.'

Near Pyhäjärvi on the morning of 12 September 2Lt Aarre Linnamaa's swarm from 1/LLv 28 engaged five 'DB-3' bombers heading towards Prääshä. Three of them were shot down and one was damaged. Linnamaa's combat report stated;

'On patrol between 0710-0830 hrs. Our three-aeroplane patrol met five DBs over Pyhäjärvi en route

Victorious pilots of 2/LLv 28 at Karkunranta on 9 September 1941. They are, from left to right, 2Lt Lasse Lehtonen, Sgt Urho Jääskeläinen, 2Lt Martti Inehmo and SSgt Urho Lehtovaara. On this day Lehtovaara, flying MS-304, claimed three I-16s to boost his overall score to ten. Parked behind the pilots is MS.406 MS-606, which was the assigned aircraft of flight leader 1Lt Reino Turkki (SA-kuva)

SSgt Urho Lehtovaara (right) of 2/LLv 28 poses in front of his assigned aircraft, MS327, at Karkunranta on 9 September 1941 after gaining his tenth kill. Standing alongside the ace is Jukka Paajanen, the fighter's assigned mechanic. Later, when flying Bf 109Gs, Lehtovaara was awarded the Mannerheim Cross after his score exceeded 40 victories (Pauli Massinen)



MS-308 of 1/LLv 28 was also photographed at Joensuu in July 1941. Its assigned pilot was 2Lt Aarre Linnamaa, who had already scored one kill in the Winter War, and added a further five in the early stages of the Continuation War. On 5 September 1941 MS-308 was so badly damaged during an air raid on Lunkula that it had to be sent to the State Aircraft Factory to be repaired (Author's collection)



to bomb in the direction of Prääshä, altitude 3000 m [9800 ft]. I shot one of the two rearmost aircraft into smoke and flames. It went down burning and on its back.

'We continued our attack against the other aircraft, which pressed down on the deck. We shot at it as we had with the previous aircraft. Then the other three DBs came to our side and I moved behind their tails. Then 2Lt Myllylä and SSgt Tani brought down their aircraft, probably in the Lohijärvi area. I climbed a bit and waved to the boys, but they did not notice and turned away.

'At the same time about ten I-153s were coming towards them at low level. They did not notice me, and I continued after the three DBs. I got one to emit smoke, then another one came by my side. I also made this smoke, expending all of my ammunition. I pulled to the side and observed that the aeroplane at which I had first fired was smoking, and one undercarriage leg was down. The other aeroplane began to smoke heavily. It banked towards the shore of Lake Onega and bellied down into a swamp in the Soksu area. The others continued to fly east-southeast over Lake Onega. On the return flight I encountered a flying boat at Bubnova.

'I got four or five holes in my aircraft. One went through an attachment point of the fuselage tube.

'My aeroplane was MS-607.'

Recently opened Russian archives reveal that the shot-down bombers were in fact three SBs from 72nd SBAP.

This machine, MS-317 of 1/LLv 28, seen at Lunkula in September 1941, was assigned to 2Lt Paavo Myllylä. By the end of 1941 Myllylä's score with this aircraft stood at 1.5 confirmed aerial victories and two probables. Later, flying the Bf 109G, he increased his total to 22 victories (Finnish Air Force)



On 15 September 2Lt Paavo Myllylä's swarm from 1/LLv 28 was engaged in a combat with a bomber escorted by five MiG-3 fighters of 179th IAP in the direction of Prääsä. The Moranes shot three of the fighters down, two falling to the guns of 2Lt Paavo Reinikainen;

'On patrol between 1620 hrs and 1735 hrs. We flew in a swarm from Sotjärvi to Prääshä, when one Bis [sic] attacked me from ahead and below. I did not see it, but those

coming behind me attacked it. 2Lt Myllylä attacked one DB bomber. Then I saw three fighters and, immediately after, two more, which I attacked. I was at 1500 m [4900 ft] altitude and the enemy at about 300 m [980 ft]. I pressed into a dive after the two fighters and called over my radio for the others to join me. The transmitter was out of order, so they did not hear.

'The aircraft in front of me started to shoot at horse and truck columns. The rearmost Bis dropped four bombs across the road. Soon after this I got it in the sights and shot past it from too far behind. The second burst hit the fuselage behind the pilot. Then I got straight behind, but I was aiming directly at the troops and I could not fire.

'During the pull-up I got the Bis in my sights, but then the aeroplane that was further ahead came towards me and I turned against it and fired a short burst with the machine gun from ahead. The Bis was crosswise in front of me and I turned back to it. The one coming towards me passed 50 m [55 yds] to the right and then I saw that it was not a Bis, as it had an in-line engine and enclosed cockpit. Right after passing me it flipped into a spin and crashed, catching fire. I held the Bis in my sight and managed to shoot from straight behind, but then the cannon jammed and I pulled aside when it broke off straight to the east. The aeroplane did not smoke or slow down, but it took 20 mm hits in the rear fuselage.

'The Russian aeroplanes had good camouflage – no insignias on their uppersurfaces and an uneven spot on the fuselage side.

'My aeroplane was MS-317.'

On 1 October the VII Army Corps of the Karelian Army occupied Petrozavodsk and continued to advance northwards along the west coast of Lake Onega, aiming at Karhumäki at the northern tip of the lake. LLv 28 was flying top cover.

Over Suopohja on 9 October a pair of MS.406s of 2/LLv 28 jumped a climbing detachment of six MiG-3s. When the combat started another pair of Moranes arrived, and all of the Russian fighters were shot down. 2Lt Martti Ihehmo claimed two destroyed and one damaged;

'We flew about eight kilometres [five miles] north to Suopohja, and I observed at 1115 hrs an enemy fighter climbing in the direction of Suopohja. I gained altitude and attacked from straight ahead, but I had to pull aside. More enemy aircraft were taking off all the time, and at one point I observed at least five I-18s [MiG-3s]. In the ensuing turning fight

MS315 and MS329 of 3/LLv 28 at Solomanni in October 1941. The former was flown by SSgt Oskari Jussila and the latter by Sgt Toivo Tomminen. Jussila claimed four victories and Tomminen 6.5, all in Moranes in both cases. Tomminen died on 4 December 1941 when he was rammed head-on in MS329 by 2Lt N F Repnikov in 152nd IAP Hurricane IIB BD761 (Author's collection)





MS327 of 2/LLv 28, seen here at Viitana in eastern Karelia in December 1941, was assigned to MSgt Urho Lehtovaara, the topscoring MS.406 pilot with 14 confirmed aerial victories. On 23 December 1941 MS327 caught fire during a warming-up procedure and was destroyed (*Pauli Massinen*)

I shot one directly from behind at 20-30 m [20-30 yds] distance. I saw the cannon shells hit its fuselage, which promptly puffed thick smoke and the aircraft jerked up, going right into a cloud. I began turning, and saw it come out of the cloud, but I was instantly attacked by another fighter. I continued the turning fight with it and after a while another I-18 joined in. They tried to cut off my exit to the west, and I ended up doing evasive manoeuvres all the way to Soralahti, where I managed to shoot at one from straight ahead. It then pulled up and went into a dive, crashing in the water near an island.

'I continued the turning fight with the other I-18 at 600 m [2000ft] at first, but it forced me below 100 m [300 ft]. Finally, I managed to get in a deflection shot from left below and behind, after which it banked, smoking, and crashed into the forest, where it exploded and caught fire.

'My aeroplane was MS327.'

On 19 October 1Lt Aarne Nissinen's swarm of 3/LLv 28 flew a search to Poventsa and engaged a Polikarpov R-Z reconnaissance biplane, which was sent down. Two *Chaikas* appeared on the scene and both were shot down as well. Two of the enemy aircraft were credited to Sgt Toivo Tomminen;

'Between 1310-1320 hrs I observed an R-Z heading towards Poventsa. I dived after it and fired one burst, after which both port wings broke off and the aeroplane crashed into a lake. Then I saw two I-153s taking off from Poventsa airfield. I attacked the rearmost as soon as it had left the ground. I fired a burst from behind and it crashed into a field on its nose. I had obviously hit the pilot.

'While I was shooting at the I-153, pieces of it flew off. A section of plating hit my starboard wing and stuck in it. There was no other damage.

'My aeroplane was MS315.'

Soon wintry weather began to set in, and poor weather and heavy snowfall prevented much flying on both sides. Only two victories were claimed by the Moranes during November.

On 4 December a swarm from 3/LLv 28 was engaged in combat by three 'I-18s' (MiG-3s) over Maaselkä. Both sides lost one aircraft in a mid-air collision. One of the participants was SSgt Pekka Vassinen;

'At 1300-1305 hrs, as we approached Maaselkä from the southwest at 1000 m [3300 ft] – I was flying on the left wing and about 400 m [440

yds] to the side – I observed two [I-18s] climbing from below and behind at an angle of about 45 degrees. The enemy still had a considerable speed advantage at our altitude.

'Sgt Tomminen had also observed one I-18, which was shooting at SSgt Jussila from 100 m [100 yds] behind. Sgt Tomminen shot at the I-18 from the side, getting hits from behind the engine to the cockpit. The I-18 suddenly pulled up, and Sgt Tomminen hit the wing of the I-18, snapping it off. Sgt Tomminen's aeroplane flipped onto its back, flew a while in this position and then its nose slowly sank into a vertical dive. A moment later I saw the aircraft burning on the ground. I descended to ground level, but did not see any parachutes. The aircraft shot at by Sgt Tomminen crashed in flames.

'The rate of climb of the I-18 was obviously good, because some time earlier Sgt Tomminen had been down at low level and not seen anything. The Russians opened fire from relatively close range.

'My aeroplane was MS-620.'

The war diary of 152nd IAP, flying Hurricanes, noted;

'Between 1255 hrs and 1410 hrs (Moscow time) three aircraft carried out a reconnaissance of enemy positions in the areas of railway junction No 13, Medvezhjegorsk, Par-guba, Kamselga, Kumsa and west of Pokrov. The mission was accomplished. The aircraft were then engaged in a combat two kilometres [one mile] south of Kriv with seven Heinkels and Me 109s. The result of the battle was two enemy fighters shot down. Additionally, 1Lt N F Repnikov rammed one Me 109 from straight ahead, our pilot being killed.'

Although the regimental war diary identifies the enemy aircraft as 'Heinkels and Me 109s', in the claim list of 152nd IAP these three kills appeared as 'Brewsters', one of which Lts Basov and Lt S Ivanov reported sharing. The other aircraft involved in the collision was clearly MS.406 MS-329, but otherwise the details of the reports do not quite match.

The fin of MS318 of 2/LLv 28, seen at Viitana in November 1941, displays bars denoting the eight victories of 2Lt Martti Inehmo – the final tally of the second-highest scoring Finnish MS.406 ace. Inehmo failed to return from a mission on Boxing Day 1941, when he was flying MS-618 (Jaakko Puolakkainen)



# STALEMATE WAR

n Finnish independence day, 6 December, the last point reached by the advancing Karelian Army was the town of Poventsa, which was occupied. Marshal Mannerheim then called a halt to the offensive, and two-and-a-half years of stalemate duly followed. Except for a few local clashes, the whole frontline fell silent. In LLv 28's sector (Lake Onega and Maaselkä Isthmus) the airspace was just as quiet. In the air, Soviet and Finnish forces were quantitatively rather even, although the *Ilmavoimat* still possessed a qualitative advantage.

On 5 February 1942 a Morane swarm from 1/LLv 28, led by 2Lt Aarre Linnamaa, flew a reconnaissance mission to Osta at the eastern end of the River Svir. En route, two Polikarpov R-5 reconnaissance biplanes were met and shot down, as Linnamaa relates;

'Between 0945 hrs and 0950 hrs, at an altitude of 10-20 m [30-65 ft], I was leading a four-aeroplane swarm along the river valley southwest from Androvkaya, shooting at trucks, when I saw an R-5 flying to the southwest in the surface fog in the valley. MSgt Tani initially fired at it from above me, but he probably did not hit it because the biplane continued as before. I then fired at it in a surprise attack from a distance of 70 m [75 yds] down to 15 m [20 yds] from above and behind. The aeroplane glided towards the ice on the river, whereupon two more aircraft shot at it, although it was already unable to fly. The aeroplane hit the ice hard (the pilot was probably dead) and turned over onto its back.

'I continued to the southwest and encountered another R-5 in the same valley as the previous one. I fired first from the side and soon after that from behind at 20 m [22 yds], and the biplane dived into the forest and flipped onto its side, at which point Capt Blomqvist shot at it from a distance, although the aircraft had already disappeared into the forest.

'I did not see any men leave the first aeroplane. The second one broke up into pieces upon hitting the forest. I did not observe the gunners firing at me.

'My aeroplane was MS-621.'

On 23 March two Moranes of 1/LLv 28 were scrambled when a pair of Petlyakov Pe-2 bombers attacked Petrozavodsk. They managed to shoot

MS-325 and MS328 of 1/LLv 28 are ready for take-off at Viitana on 17 March 1942. Two weeks after this photograph was taken MS-325 was assigned to the new flight leader, Capt Pekka Siiriäinen, and MS328 was assigned to Capt Tuomo Hyrkki. The latter machine is still painted in French camouflage (SA-kuva)



one of the aircraft down, as MSgt Antti Tani reported;

'After an earlier test flight in MS-619 I took off in this aircraft directly from the blast pen. At 0825 hrs, when I had reached an altitude of 1500 m [4900 ft], I received a radio message – two Pe-2s from Soksu heading directly north. I was then in a steep climb heading directly for Äänislinna, and at the same time I climbed through the clouds. Then I made a 360-degree climbing turn,

after which I observed the enemy aeroplane about two kilometres [one mile] away and 300-500 m [1000-1600 ft] higher than me.

'When the distance had reduced to 250-300 m [800-1000ft] I fired, but the deflection was too small. I pulled more deflection, fired and again increased the deflection. Now the burst seemed to hit. After this I turned behind the aeroplane at 300-400 m [330-430 yds] and fired three bursts. After the last one the aeroplane made a steep 180-degree turn and began

a shallow ascent. It appeared to me that the bomber had lost considerable speed. I tried to fire again, but my Colt guns jammed.

'While I was fixing this problem the aeroplane made a steep 90-degree turn towards me, and I dodged with a combat Immelmann turn. During that manoeuvre my guns began to work again, and at the moment of passing I observed that the enemy aeroplane had fallen into a spin. Then it seemed that the pilot cut the engines. I thought this was a bluff, so I followed the aeroplane down in a spiral from a position some 800-1000 m [2600-3300 ft] higher, waiting for it to level off. When the aeroplane reached 300-500 m [1000-1600 ft] altitude I knew that it could no longer pull up. The bomber hit the ground right after that.'

By 3 May 1942 the fronts had remained calm for six months. The air arm took advantage of this lull in the action to reorganise itself, with the control of frontline units being divided up along territorial lines. This change was heavily criticised by the leaders of the



Seen at Viitana on 17 March 1942, MS-607 of 1/LLv 28 was 2Lt Aarre Linnamaa's second assigned aeroplane, in which he scored two of his six victories with Moranes. He was killed on 24 April 1942 after making a forced landing in enemy territory (SA-kuva)





Allocated to long-time flight leader 1Lt Reino Turkki, MS-606 of 2/LLv 28 is seen at Viitana in March 1942. Almost an ace, Turkki was credited with four confirmed kills and two probables. He later rose to the rank of lieutenant general and became the commander of the *Ilmavoimat* in 1964 (*Finnish Air Force Museum*)

The deputy leader of 3/LLv 28, 1Lt Jouko Myllymäki (left), and SSgt Pekka Vassinen brief in front of MS-616 at Solomanni on 23 March 1942. Myllymäki scored two victories on Moranes and later became an ace after adding three kills while flying the Bf 109G-2. His was listed as missing in action on 25 June 1944 (SA-kuva)



MSgt Urho Lehtovaara runs the engine up in MS-304 of 3/LLv 28 on Petrozavodsk airfield, Solomanni, on 26 March 1942. Although the aeroplane did not have a tactical number, it was marked with six bars denoting the victories that had been achieved in MS-304 by various pilots – three of them by Lehtovaara on 9 September 1941. He would claim another kill in this aircraft on 4 April 1942 (SA-kuva)

fighter regiments, however, as they believed that in the new system the most important feature of the air arm, mobility, could not be fully exploited.

Despite the reorganisation, LeR 2 continued to operate with the Maaselkä Group. In addition to LeLv 24 and LeLv 28 (the squadron abbreviation had changed from LLv to LeLv during the reorganisation), LeR 2 also added LeLv 16 to its ranks. In the regiment's new sector of responsibility its territorial limit to the left was set at Lieksanjärvi-Kuusiniemi-Vojatsu-Virma and to the right at Lohijärvi-Derevjannoje-Ääninen-Volodarskaja-Vytegra.

LeR 2's tasks were specified as 1) reconnaissance, artillery, bombing and transport missions, 2) interception of enemy aircraft and 3) protection of transports, transfer flights and bombers. These missions were to be flown at the request of the Maaselkä Group, the Onega Coastal Brigade and the Olonets Group. In practice LeLv 16 reconnoitred the closer areas at Maaselkä, LeLv 24 took care of interception and long-range reconnaissance along the whole front and LeLv 28 was responsible for Lake Onega and the areas south of it.

On 3 August LeLv 28 became LeR 2's sole fighter unit, and its sector was extended to the Maaselkä Isthmus. The HQ and the 3rd Flight of the squadron moved to Hirvas and the 1st Flight was sent to Petrozavodsk.

Several weeks earlier a 700-man Soviet partisan brigade had slipped through the lines undetected east of Lake Ontajärvi, and by the end of July it had managed to advance to a position 40 km (25 miles) southwest of

MS328 of 1/LeLv 28, seen at Solomanni in May 1942, was assigned to flight leader Capt Tuomo Hyrkki. For many years officially credited with four confirmed victories whilst flying the MS.406, Hyrkki recently 'made ace' when his claim for an I-16 damaged on 8 June 1943 was upgraded to destroyed following information gleaned from the Russian archives (Author's collection)



Lake Segozero, into the rear of the Maaselkä Group. Once engaged by the Finnish Army, the partisans retreated along the same route – its remaining troops crossed the waterways at Lake Jolmozero. On 18 August a swarm of 1/LeLv 28 MS.406s was sent to Jolmozero to strafe the partisans crossing the waterways. The troops were protected by a four-Hurricane detachment, of which the Moranes shot one down and damaged two more. As SSgt Matti Leinonen reported;

'On patrol between 0740 hrs and 0900 hrs, flying mainly at an altitude of 600 m [2000 ft]. While the swarm was strafing the enemy's transport barges at Jolmozero, four Hurricanes attacked us. I managed to shoot the first one obliquely from behind, whereupon it started to smoke heavily. At the same time another came obliquely towards me, and I also fired at this aircraft. It broke off, smoking, and disappeared down to low level. I followed the first one, firing short bursts all the time. The aeroplane staggered and flew out of control, constantly losing altitude and speed. It then flew along a swamp valley at a height of just 5-6 m [16-20 ft], the terrain rising to the east. The speed of the aeroplane was then so low that my MS.406 could not stay behind the enemy fighter, and I tended to pass it. The Hurricane pilots were not willing to fire from straight ahead, dodging in time to avoid fire and attempting to approach from below and behind. I received no damage.

'My aeroplane was MS-619.'

On a later mission that same day eight Moranes patrolling over Jolmozero were attacked by a similar number of Tomahawks. One Soviet fighter was damaged, but a Morane was shot down. Russian records reveal that the Hurricanes and Tomahawks of 152nd IAP and 195th IAP reported having shot down four Fokkers and one Brewster in the Maaselkä area – quite an escalation from the loss of one Morane.

On 24 August Maj Auvo Maunula took over the command of LeLv 28. Two weeks later he was awarded the Mannerheim Cross for earlier achievements as the commander of a reconnaissance squadron.

MS-619 of 1/LeLv 28 at Petrozavodsk, Solomanni, in August 1942. It was assigned to MSgt Antti Tani, who claimed seven kills with Moranes out of his total of 20.5 confirmed victories. Unusually, the fighter's tactical number is present in white outline form only (Author's collection)





MS-622 of 2/LeLv 28 has been hoisted onto supports at Hirvas for undercarriage testing following a nose-up landing on 22 October 1942. The aircraft escaped without incurring any serious damage. It was regularly flown during this period by Sgt Pentti Piispa (Finnish Air Force)

On 1 September three Pe-2s bombed Hirvas airfield in a surprise attack. When the swarm of LeLv 28 Moranes on duty got airborne, 29 Tomahawks, Hurricanes, I-153s and I-15s suddenly appeared from the north and began to strafe the airfield with machine guns. Two MS.406s were scrambled from Solomanni to assist, but they were slow in getting airborne and then faced jamming problems with their heavy weapons once overhead Hirvas. As a result only one Tomahawk was damaged for the loss of a Morane. After the raid a single Pe-2 photographed the target.

The Hurricanes and Tomahawks of 152nd IAP and 195th IAP and the *Chaikas* of 828th ShAP reported having shot down four Brewsters in the Hirvas area, when only a solitary Morane had in fact been lost.

From 16 September Russian air activity increased on the Maaselkä Isthmus, and the pilots and aircraft of LeLv 28, now few in number, began to face difficulties. To improve the situation Detachment Luukkanen, consisting of ten Brewsters from LeLv 24, was transferred to Hirvas and seconded to LeR 2. Within two weeks, however, Russian missions in the Maaselkä area had decreased again owing to units being transferred to the north to escort vital supply convoys bound for Murmansk and Archangel. Detachment Luukkanen of LeLv 24 soon returned to the Karelian Isthmus.

### New Old Aeroplanes

On 16 July 1942 Finland bought 30 MS.406s directly from Vichy France. This drew a protest from the Germans, who claimed that the official channels were not used, but nothing more came of it. The aircraft had



MS-624 of 2/LeLv 28, photographed at Hirvas whilst assigned to Sgt Uolevi Jaakkola, was temporarily painted in white winter camouflage on 20 February 1943. The whitewash 'recipe' employed by 2/LeLv 28 groundcrew consisted of casein glue mixed with chalk powder (Erkki Jaakkola)

been flown to Finland in three batches by 9 September 1942. The State Aircraft Factory gave them a full overhaul, and they began to reach squadrons in October. The serial numbers for these aircraft were MS-626 to MS-655. In late 1942 the last two Moranes, MS-656 and MS-657, bought from the Germans, were flown to Finland.

There was little aerial activity over the Maaselkä Isthmus during the final months of 1942, however, with the only contacts being a few visual observations along the frontline. This all changed on 12 January 1943 when a swarm of Moranes from 2/LeLv 28 was on an escort and search mission in the Nopsa area. The Finnish fighters engaged four Pe-2 bombers escorted by three Hurricanes, and one of the latter machines was shot down by MSgt Urho Lehtovaara. He reported;

'While patrolling between 1235 and 1445 hrs between Liistepohja and Karhumäki we observed north of Maaselkä at a very high altitude one Pe-2 aircraft, which glittered as it continued to gain altitude. We immediately climbed after it, and after about ten minutes I was in a position to open fire from about 600 m [655 yds] below and behind.

'Simultaneously, a Hurricane fired at me from above and behind, and I had to give up the chase. A turning fight then developed between three Hurricanes and myself. I managed to shoot at one of my opponents in a bank, and scored a

hit with the burst, whereupon the Hurricane suddenly stalled and fell away in a spin down to the ground, where it exploded and burned. Right after this I was able to fire at the second Hurricane, which evaded, smoking. The third Hurricane broke off the battle in a dive and disappeared to the northeast.

'My aeroplane was MS-627.'

On 24 February a pair of MS.406s from 1/LeLv 28 encountered a lone Pe-2 over Sautjärvi. After a short pursuit it was sent down by MSgt Antti Tani, who recalled;

'While on an interception mission I was radioed at 1255 hrs about an aeroplane flying southwards from Maasjärvi. I was flying in the same direction, and sighted it after about four minutes. At Tokari the aeroplane turned north. Then I managed to fire from ahead on the right side, when the starboard engine began to smoke, first weakly and then stronger all the time. I followed the aeroplane until it crashed. During the pursuit I fired a further three bursts into it.





MSgt Antti Tani and his mechanic, Risto Hiltunen, at Solomanni in front of 1/LeLv 28 machine MS-619 in March 1943. Tani claimed two Pe-2s destroyed in MS-619 on 25 March 1942 and 24 February 1943. His real haul came with the Bf 109G, when he added 13.5 victories to his tally (Risto Hiltunen)

Seen at Hirvas, in eastern Karelia, during March 1943, MS-615 of LeLv 28 was flown by unit CO, Maj Auvo Maunula. He had three victories to his credit, and six months earlier he had been awarded the Mannerheim Cross for his bravery and leadership whilst serving as a reconnaissance pilot and commander. His rank allowed him to use a large blue-and-white 'X' as a tactical marking on his assigned MS.406 (Author's collection)



Borrowed by LeLv 34 for a series of evaluation flights, MS328 was photographed at Utti in early 1943. On 5 May 1943 it was returned to 1/LeLv 28 and assigned to Sgt Martti Vihinen. The five victory bars marked on the leading edge of the fighter's fin denote kills by four different pilots. The winter camouflage was typical for most squadron machines during this period (Klaus Niska collection)

'My aeroplane was MS-619.'

On 5 March a Morane patrol of 2/LeLv 28 scrambled in pursuit of a bomber northwest of Karhumäki. MSgt Urho Lehtovaara reported thus;

'I took off at 1355 hrs on an alarm mission and climbed to 5000 m [16,400 ft] northwest of Karhumäki. I was radioed that there was one aircraft north of Savujärvi. Immediately below me against the clouds I saw a twin-engined aircraft heading north. I dived after it and soon recognised that it was a Pe-2. I shot at the bomber from directly behind, hitting the starboard engine and setting it on fire. The aeroplane crashed into the ground, where it remained burning. During the dive one man bailed out of the burning aircraft.

'I followed the burning aeroplane down so as to pinpoint the exact location of the crash site, but at an altitude of about 1000 m [3300 ft] I was attacked by four I-16s. I fought a fierce aerial battle with the four enemy aeroplanes. My windscreen had been covered in oil from the Pe-2, and this obstructed my view to such an extent that several of my bursts missed the target. I finally got behind and slightly below one of the enemy fighters and gave it a long burst. Some of the I-16's ventral plating came loose and the aircraft fell away to port and hit the ground. I also tried to fire at the other enemy fighters, which still kept attacking me, but my aircraft's machine guns stopped working, so I was forced to break off the combat.

'My aeroplane was MS-641.'

The CO of 2/LeLv 28, Capt Reino Turkki, and his wingmen intercepted two Hurricanes in the Käppäselkä area on 4 May. One of the Soviet fighters was subsequently claimed as destroyed, as Turkki explained;

'I had scrambled at 0940 hrs with a three-aeroplane patrol, and at Käppäselkä we encountered two Hurricanes at an altitude of 2000 m [6,500 ft]. In the ensuing combat I shot at both aeroplanes. One of the aircraft, with silver-coloured wings, soon broke away from the combat. After this I was harassing the other Hurricane with 2Lt Tarkkonen, shooting at it twice from short range. It started to pour smoke during the turning fight, but the pilot then took evasive action and the speed of the Morane could not match it.

'During the chase I observed an aircraft flying on the deck south of Povents, which I easily caught. It began to smoke heavily after my first burst. After the second burst I suffered a gun malfunction. I followed the aircraft and saw it fall on the east bank of the Voljärvi Canal, strong blue smoke puffing out of its engine. The aeroplane did not burn and the fuselage was clearly visible in the forest.

'The Hurricane is not as agile as the Morane. Flak was fired from Käppäselkä during the combat.

'My aeroplane was MS-626.'

Turkki had engaged three Ilyushin Il-2 ground attack aeroplanes after his clash with the Hurricanes, and as he noted in his combat report, he had been able to shoot one down. Another pilot in his swarm claimed a second Il-2 destroyed.

Four days later a pair of LeLv 28 Moranes that were on a search mission to Seesjärvi were bounced by a detachment of four I-16s. In the ensuing combat two Russian aircraft were sent down immediately and a third a short while later – the fourth I-16 escaped. Leading the Finnish fighters was unit CO Maj Auvo Maunula, who described this action as follows;

'While I was flying a search mission with a patrol I met at 1915 hrs four low-flying I-16s at Suontele – they were about 1500 m [5000 ft] below us. I surprised them as they were shooting at the ground at the time. I chose a target, but when I dived towards it another observed me and began to climb and bank in my direction. I broke off my attack and, after climbing and turning, got above and behind the second I-16.

'The aeroplane quickly evaded by diving away. I went after it, and once the fighter was in my sights I fired a short burst from obliquely behind. I could not see the results because another aeroplane was attacking me from above and to the right. By pulling up I was able to get above it to one side. Then the I-16 commenced a series of rolls, some of which, in a 30-degree dive, approached the deck. I managed to fire a short burst, but then observed two aircraft 300-400 m [1000-1300 ft] above me on the port side.

'By climbing and banking I was able to get above and slightly behind the pair of I-16s just as they commenced a dive from about 1000 m [3300 ft] down to the deck. They headed east, and I followed one aircraft that continued to fly on the deck, easily dodging the short bursts I fired at it. I was struggling with my aim, but eventually the pilot tried to break off by climbing into a banking turn. During this manoeuvre I shot a long burst from a distance of just 100-75 m [110-80 yds], hitting the front fuselage. The aeroplane then dived into a bay below me and disappeared under the sludge.

'My aeroplane was MS-615.'

On 4 June 1Lt Juhani Ruuskanen's Morane pair from 3/LeLv 28 were scrambled to Seesjärvi, where they engaged two SB bombers, both of which were shot down in flames. Ruuskanen reported;

'I took off with 2Lt Antere on an interception mission at 1325 hrs following receipt of an air surveillance message stating that two bombers had been sighted to the southwest at an altitude of 40 m [130 ft]. We spotted the aeroplanes southwest of Semsjärvi as they flew towards us at an altitude of 150 m [490 ft] – we were at 400 m [1300 ft]. They did not see us until we were very close, at which point they immediately turned

north. I took the port one for myself and fired at it from 150-100 m [160-110 yds] with three short bursts prior to my guns jamming. After this I saw 2Lt Antere fire at the aeroplanes from 150-100 m distance. I managed to fix my machine guns to fire one round at a time, and when I noticed that Antere's guns had also jammed I switched the control column to my left hand and in turn made cocking manoeuvres with my right hand.

'I had fired about 20 rounds at the aircraft on the right from 50-20 m [55-22 yds] when the centre fuselage caught fire, but the flames were soon blown out again by the slipstream. I shot off a further ten rounds, at which point the bomber caught fire again and crash landed onto Lake Seesjärvi and sank. I then shot two rounds into the port engine of the other aeroplane from about 20 m [22 yds]. It caught fire immediately, the flames spread fast and the aeroplane fell burning into Lake Seesjärvi and sank. The pilot did not try actual low-level flying, instead remaining straight and level all the time. Although his bomber was burning, the nose gunner in the first bomber fired three long bursts into the ground at the tip of a peninsula northeast of Jouhivaara.

'My aeroplane was MS-657.'

Four days later, at noon 1/LeLv 28 leader Capt Tuomo Hyrkki's swarm escorted Fokker C.X dive-bombers of 3/LeLv 16 north of Maaselkä. Over Sumeri railway station they engaged two I-16s. One was shot down and the other escaped due to the malfunctioning of the Moranes' heavy machine guns. Hyrkki's report stated;

'After the FK [Fokker] aeroplanes bombed a train two kilometres [one mile] north of Sumeri railway station, two I-16s appeared on the scene, obviously planning to attack the FKs. I pushed my aeroplane into a dive and bank when the enemy fighters turned towards me. I shot at both from straight ahead, but without any obvious results. I made a fast turn, but ended up too close to the enemy after the turn, so the enemy could not fire at me properly and I could not fire at the enemy aeroplane either.

'After passing it I made a swift turn and ended up in the opposite direction again from the enemy aeroplanes, which were flying in a row about 200 m [220 yds] apart from each other. I got a good bead and opened fire from a distance of about 200 m, and I saw the burst hit the engine. The enemy aeroplane went into a dive and soon after that it caught fire. The pilot bailed out.

'I managed to shoot at the other one twice from relatively close range, but due to gun malfunctions I was forced to break off the combat. At one point black smoke came out of the enemy aeroplane, but it stopped before I had to leave the battle. The enemy aircraft were using rocket projectiles, which after being fired from the wings exploded 50-10 m [55-11 yds] behind the aircraft!

'My aeroplane was MS-657.'

Recent research in the Russian archives proved that both of the I-16s, from 197th IAP, were shot down. Thus Hyrkki gained his fourth and fifth victories, and 'acedom'.

On 16 June the long-time commander of LeR 2, Col Richard Lorentz, was transferred to the air force headquarters as the inspector of air warfare, and Lt Col Raoul Harju-Jeanty was appointed as his successor. The new CO's first job was to specify the tasks of the regiment as follows – LeLv 16



was in charge of the reconnaissance of enemy shipping and ports in Lake Onega, photography of the mouths of the Vodla and Vyterga rivers, and bombing of the ports, piers and warehouses at Tsolmutsa, on the Vodla river, and at Vytegra. LeLv 28 was to escort LeLv 16 assets when necessary, in addition to conducting its interception duties.

Three days later the commander of the *Ilmavoimat* instructed LeR 2 to save fuel, and it in turn told LeLv 28 that the unit was only permitted to take off to intercept enemy aircraft or escort Finnish machines on the direct orders of LeR 2's commander. The already quiet Lake Onega sector grew even quieter, and only one minor and inconclusive clash occurred in the latter half of 1943.

### - SOUTH VIENA FRONT

LeLv 14, stationed on the northernmost airfield at Tiiksjärvi, close to the White Sea, was reorganised on 1 August 1942. The 1st Flight had begun receiving MS.406s as their sole equipment, and the pilots transferred to the flight had previously flown Fokker D.XXIs in the reconnaissance and interception roles. The Moranes would take over the fighter duties, as well as the more demanding reconnaissance missions.

On 1 September LeLv 14 flew its first mission with the Moranes, while training and evaluation was still in progress. By November the flight was fully operational and in charge of the airspace. The unit had to wait until 5 November, however, to claim its first victory. On that date a pair of Moranes from 1/LeLv 14, led by 1Lt Martti Kalima, flew a reconnaissance mission to Segozero, where they were bounced by a single LaGG-3. Another LaGG soon appeared on the scene and both were sent down. Since five more Russian fighters were seen approaching, the Finns decided to break off and return to Tiiksjärvi. The squadron's first Morane victory is recounted here by Kalima;

'Between 1155 hrs and 1340 hrs I patrolled with Sgt Leino at an altitude of 2500 m [8200 ft] west of Voijärvi, heading eastwards. From the north came one LaGG-3 flying almost on the wing of Leino, who was on my right and about 200 m [650 ft] below. Leino tried to get behind the LaGG, but it dodged towards me in a climbing turn. The pilot

MS-611 of 1/LeLv 14 at Tiiksjärvi in March 1943. Sgt Aaro Nuorala, who was the fighter's regular pilot, scored 1.5 victories with the Morane, and ended the war with 14.5 victories to his credit. 1/LeLv 14 applied white tail numbers to its MS.406s, 18 being the highest known (*Kaarlo Temmes*)



The two victory bars adorning the rudder of MS-319 of 1/LeLv 14 at Tiiksjärvi in the summer of 1943 denote the I-152 kills gained by Sgt Hemmo Leino on 16 March that year. Leino had three Morane claims in his final tally of 11 confirmed victories (*Toivo Vuorinen*)

obviously failed to see me, so I easily got behind it. The fighter pulled into a shallow dive to the east and tried to escape. I was about 100 m [110 yds] away from it, took a glimpse in the rear mirror and saw the nose of an enemy aircraft behind me, and at the same time a burst passed over me. I planned to evade, but the aeroplane in the mirror then flipped to starboard and emitted black smoke. I took aim again on the one ahead of me and fired a short burst. Pieces tore off behind

the cockpit and the aeroplane pulled slightly up, banking to the starboard side. I fired at it from 60 m [65 yds] and the aeroplane burst into flames and went down in a spin.

'The enemy fighters had smoke tracers, and appeared to be clumsily flown. There was no damage to my MS-326.'

Kalima also became an ace on this mission, and continued claiming to become the unit's top scorer, and evidently its only MS.406 ace.

Generally, the chances for scoring aerial victories on this front were scarce, as there was little aerial activity over South Viena through to the end of hostilities in September 1944. Occasionally, however, something happened. For example, on 14 March 1943 a Finnish commando detachment commenced the destruction of Russian partisan stores in Jeljärvi village. For the next two days LeLv 14 flew top cover for the vehicular transport carrying the detachment along the Rukajärvi-Ontajärvi road. In addition, a six-aeroplane Morane detachment from LeLv 28 flew from Tiiksjärvi for four days to provide top cover during the destruction of the Jeljärvi warehouses.

On 16 March the commandos destroyed the stores at Jeljärvi free from Russian aerial interference. Shortly after that the five Moranes of 2/LeLv 28 escorting the commandos shot down two Tomahawks from a formation of five. One of the fighters was claimed by SSgt Vesa Janhonen;

'When patrolling between 1145 and 1350 hrs south of Jeljärvi I observed SSgt Jussila pull up and bank to the right, where I noticed five aircraft, of which four attacked, trying to get in behind our swarm. We were then 200 m [650 ft] lower than the attackers. We dodged the enemy fighters by banking. After this the clash became a turning fight. I observed one enemy behind 1Lt Ala-Panula. I attacked from about 300 m [980 ft] above the Tomahawk, firing at it from behind and below from a distance of 50-60 m [55-65 yds]. I had to dodge another enemy machine, so I could not see the results of my shooting.

'After this I was subjected to several attacks, which I again dodged by banking. The enemy aircraft now began a turning fight, after which it pulled up – I could not follow it in the pull-up. I began to climb after it, and as I was about to get behind its tail it turned into a dive and began heading to the southeast, away from the scene of the combat. I went after the Tomahawk at full throttle and got to within 100 m [110 yds] of it



MS-311 of 1/LeLv 14 at Tiiksjärvi, in south Viena, on 20 June 1943. This machine was often flown by 2Lt Lasse Kurten. Although it was not an 'ace' aeroplane, MS-311 had the distinction of sporting a 'sharksmouth' for a short period in the summer of 1943 (Author's collection)

before firing from straight behind. The enemy began to bank to the right. I shot at it as it banked, and the fighter crashed in the forest.

'In the final stages of the combat we were down on the deck. I chased another Tomahawk, which appeared on the wing of the second machine I was firing at without helping his comrade in any way to break off. I crossed the Murmansk railway behind it and gave up the chase, not being able to catch it. My aeroplane, MS-645, suffered no damage.'

Throughout that day LeLv 14 undertook 35 sorties. In the afternoon Capt Martti Tainio's Morane flight managed to surprise a ten-aircraft I-15bis detachment from 839th IAP, sending five down on their first pass and a further two during the ensuing combat. Future ace Sgt Hemmo Leino claimed two aerial victories, and his combat report briefly stated;

'Between 1425 hrs and 1435 hrs over Jeljärvi-Kotskoma at an altitude of 50 m [160 ft] I observed three I-15s heading east below me. I attacked the lead aeroplane and shot at it until it fell into the forest. After this the wingmen banked away, and now I began shooting at the aircraft flying on the starboard side. It caught fire, but the fire went out, after which it rolled onto its back and disappeared from my sight since I had to pull up to avoid a collision.

'My aeroplane was MS-319.'

Exactly one week after commandos attacked the Jeljärvi store a Morane pair from 1/LeLv 14, led by 1Lt Martti Kalima, shot down an I-16 east of Lake Ontajarvi. Kalima reported;

'At 0840-0845 hrs, flying at an altitude of 200 m [660 ft] with Sgt Nuorala, I met two eastbound I-16bis aeroplanes east of Lake Ontajärvi. We managed to take them by surprise from behind, and when closing in (distance 50-70 m [55-75 yds]) I fired at the aeroplane on the port wing, which burst into flames and evaded, but the fire went out. Early in the turning fight Sgt Nuorala and I got behind the I-16bis and we both fired bursts at short range, causing the aircraft to catch fire and crash.

'My aeroplane was MS-326.'

The following months were quiet both in the air and on the ground on the South Viena Front. Enemy aircraft were occasionally seen, but they avoided contact.

On 14 February 1944 the squadrons at the front were renamed according to their function. Since LeLv 14 was basically a reconnaissance squadron, its new abbreviation was TLeLv 14.

On 13 April the Morane swarm of 2/TLeLv 14 leader Capt Martti Kalima went to Rukajärvi for an interception. They met two LaGG-3s, one of which was shot down. The other pilot used his aircraft's speed

to escape. The unit's next aerial action occurred on 26 May when 2/TLeLv 14, led by Capt Kalima, was on a reconnaissance mission to Jeljärvi and it engaged four LaGG-3s. They tried to break off, but one of them failed to do so in time and fell prey to Finnish guns.

One week later Morane pairs from 1/ and 2/TLeLv 14 reconnoitred Kuutsjärvi, where they encountered ten LaGGs. One Morane was hit but managed to return to Tiiksjärvi. The Russians, on the other hand, lost three aircraft. Capt Martti Kalima, who shot down two of them, wrote;

'Patrolled Kuutsjärvi-Ontajärvi from 1500 m down to 50m [4900 ft to 165 ft] between 1750 hrs and 1900 hrs. I was top-cover leader on a reconnaissance mission when four LaGG-3s attacked us at Jeljärvi, two going for the low patrol and two for my patrol. In the ensuing turning fight I fought two Russians after some fighters that joined the fray forced my wingman away from me. After the initial pass, both Russians circled at an altitude of 1000 m [3330 ft]. I surprised one and got at its neck from above, zooming up and bouncing it. After my fourth such pass the aeroplane spun away and crashed into the forest.

'After this I gained altitude because I saw three more enemy aeroplanes coming in from the southwest some 500 m [1600 ft] higher than me. My wingman, Capt Anttonen, then attacked the solitary enemy whose wingman I had just shot down. I was in a shallow rising turn when, out of the sun, two more aeroplanes attacked me. I was slow to evade and I was hit in the wing and my undercarriage dropped down. I tried to break off into a cloud but did not make it, and I had to go down on the deck instead. We fought on at treetop height, and I wound up some 12-15 km [7-9 miles] southwest of Ontajärvi. Finally, I had no choice but to try a face-off [head-on pass], and I did hit the enemy directly in the face and below. The Russian exploded at a distance of some 30 m [32 yds], just as I went under it. The remains of the fighter fell into a swamp.

'At this point there was one Russian at an altitude of 1500 m [4900 ft] who had followed the fight but not got into it. I made it back to our side without that enemy aircraft attacking me even once. Two 20 mm and two 12.7 mm rounds hit my aeroplane, which was MS-622.'

These were Kalima's 10th and 11th victories, making him TLeLv 14's top scorer – indeed, he was the unit's only ace. Twelve days later he was





Capt Martti Kalima, flight leader of 2/TLeLv 14, in front of his Morane, MS-622, at Tiiksjärvi in early June 1944. Kalima was his unit's only MS.406 ace, with 6.5 kills bringing his score to 11 in total. All of his earlier successes had been achieved flying Twin Wasp-engined Fokker D.XXIs in 1941 (Ragnar Rosenberg)

The first Mörkö-Morane of 1/HLeLv 28, MSv-631 takes off for an interception from Värtsilä, in Karelia, during August 1944. The victory bar signifies a Yak-9 shot down on 16 July 1944 by SSgt Lars Hattinen – the last Morane ace and, actually, the last Finnish ace of World War 2 (Olli Riekki)

appointed to lead a group of pilots that went to Germany for nightfighter training, but the detachment returned three months later when Finland withdrew from the war.

On 6 August 1944 all eight Moranes of 2/TLeLv 14 had to fight 19 Airacobras over Ontrosenvaara. One of the Soviet fighters was destroyed, as was a Morane. The squadron's final aerial victory is described here by 1Lt Matti Niinimäki;

'We patrolled over Tahkokoski-Kypärinen at an altitude of 200 m [660 ft] between 1845 hrs and 1930 hrs. As I flew away from the cloud base I saw two Airacobras on the deck, and after an 800 m [2600 ft] dive I managed to fire at one of them at a range of 100 m [110 yds], hitting it and making it dive into the forest at a 45-degree angle. As I pulled up to avoid another pair of Airacobras I saw an aeroplane crash into the woods.

'My aeroplane was MS-629.'

## - MÖRKÖ MORANE -

A major conversion of the MS.406 entailed fitting the aircraft with a captured Russian Klimov M-105P engine. This had the same external measurements as the Hispano-Suiza 12Y31 from which it was developed, but the output of the Soviet engine had been increased from 860 hp to 1100 hp. The prototype was ordered on 22 October 1942, and the M-105 was first installed in MS-631. On 4 February 1943 WO Aarne Siltamäki took the aircraft aloft for the first time. The initial flights were successful and the prototype was due for further development, but there was no hurry because Bf 109Gs began to arrive in Finland only a few weeks later.

Engineers initially struggled to solve problems with MSv-631's liquid cooling system, but these had been solved by the spring of 1944. Soon

after that two more Moranes were converted, and by 21 November 1945 all 41 remaining MS.406s had been modified to MSv.406 standard.

The Mörkö Morane (Ghost Morane), as the MSv.406 was called, had a top speed at sea level of 445 km/h (276 mph), 510 km/h (317 mph) at 4000 m (13,100 ft) and a cruising speed of 410 km/h (255 mph). It could climb to 5000 m (16,400 ft) in eight minutes and had a service ceiling of 10,300 m [33,780 ft]. The fighter's armament consisted of one Mauser MG 151 20 mm cannon between the cylinder banks and one Chatellerault MAC 1934 7.5 mm machine gun in each wing.

### - FINAL BATTLES -

A major offensive by the Soviet Army, which started on 9 June 1944 on the Karelian Isthmus, initially had no effect on LeR 2's sector. Nevertheless, the 2nd and 3rd Flights of HLeLv 28 were combined to form Detachment Sovelius, and it was ordered to transfer to LeR 3. The rapid movement of the frontline in the Karelian Isthmus caused the HQ to order troops at Maaselkä to move closer to the Finnish borders on 17 June. The LeR 2 units were now ordered to retreat, and this was begun on a squadron basis.

Twenty-year-old fighter pilot Sgt Lars Hattinen at Hirvas in front of 1/LeLv 28 Morane MS-317 in the summer of 1943. He claimed all six of his kills during five weeks in the summer of 1944, three of which were the only victories ever credited to the Mörkö Morane (Author's collection)





Post-Continuation War Mörkö-Morane MSv-633 of HLeLv 21 at Rissala, near Kuopio, where it arrived on 17 March 1945. Two weeks later blue-and-white cockades were painted on the aircraft as demanded by the Allied Supervision Commission, headed by the Soviet Union (Olli Riekki)

On 1 July HLeLv 28 received its first Bf 109G-2 – it was sent ten more during the course of the month. These equipped the 2nd and 3rd Flights, while on 11 July the 1st Flight received its first Mörkö Morane at Värtsilä. Five days later a Mörkö Morane of 1/HLeLv 28 saw action for the first time after SSgt Lars Hattinen was scrambled;

'I took off at 1800 hrs to intercept aeroplanes heading west from

Ägläjärvi. At Tolvajärvi I saw four Yak fighters, two at 1000m [3300 ft] and two at 3000 m [9,800 ft], and on the deck I saw six Il-2s. I attacked the lower pair of Yaks, which flew in an agitated manner. They evaded right away and a turning fight ensued, which the upper pair also joined. The aeroplanes were very agile and equal to the MSv, and it was hard to put a bead on them. After some turning around the top pair went for the deck and the other pair attempted to break off eastwards.

'The battle went on for some 15 more minutes, until I got a clean shot at the aeroplane I had first targeted. I gave it a burst, but it kept evading. On the second burst it caught fire and fell into a swamp from 10 m [35 ft]. I tried to get the other Yak, but he had a speed advantage of maybe 20 km/h [12 mph]. It broke off. Then I went after the Il-2 formation flying to one side of me. I fired at them from the side, but my cannon was out of action. I gave them a burst with my wing guns but, knowing they have no effect on Il-2s, I gave up the chase.

'The MSv had proven itself to be equal to the Yak fighter. Although the latter machines were very agile and their pilots skilful in handling them, the Yaks did not get into a firing position during my fight with them.

'When the II-2s observed me they dived down to the deck and closed up the formation. When I attacked from the side, one turned towards me, firing its frontal cannon. I had obviously interrupted their mission since they seemed to have a lot of ammunition left.

'My aeroplane was MSv-631.'

During the late morning of 30 July, TLeLv 14's Detachment Vuorinen, which was sent to assist HLeLv 28, had to fight more than 30 Russian fighters over Tolvajärvi. One Airacobra was shot down with no losses to the Finns. The Mörkö Morane of 1/HLeLv 28 pilot SSgt Hattinen engaged a Russian formation consisting of about 30 Il-2s escorted by 20+ fighters. Hattinen quickly shot down two Airacobras, but when he went after the ground-attack aircraft their return fire hit his fuel tank and torched MSv-617. Hattinen dived away, pulled up again and bailed out to safety. The two Airacobras credited to Hattinen following this mission made him the last Finn to achieve ace status during the Russo-Finnish conflicts.

All aerial activity had ceased by 10 August, and on 4 September 1944 the commander of the *Ilmavoimat* ordered the air regiments to inform their squadrons that all fighting was to stop at 0700 hrs that day. The ceasefire duly came into effect, and two weeks later this was confirmed by the signing of the Moscow Armistice.