Wings, Women, and War

How will female pilots perform in combat? The answer may lie not in the future, but in the past.

by Reina Pennington

The German ace must have thought everything was in his favor on that September day in 1942. A senior pilot in the Richthofen Fourth Air Fleet and a three-time winner of the Iron Cross, he was flying over Stalingrad in skies ruled by the Luftwaffe. And the Soviet Yakovlev fighter attacking him had just run out of ammunition.

As the German pilot prepared to turn the tables, another Yak suddenly closed in and began an unrelenting assault. Despite his violent evasive maneuvers, he could not shake this Russian. The Yak-1 stitched his Messerschmitt Bf 109 full of holes, setting the aircraft on fire and forcing the pilot to bail out behind Red Army lines.

The German was captured and taken to the command post at the Soviet airfield of Srednyaya Akhtuba. There, some accounts say, he asked to meet the pilot who had shot him down; others say the meeting was his interrogator's idea, an attempt to persuade the German to talk. But when Junior Lieutenant Litvyak was presented to him, he assumed it was someone's idea of a joke. Standing before him was a petite, 20-year-old woman. He refused to believe he'd been beaten by this pilot, this schoolgirl, until Libya Litvyak coolly related a blow-by-blow description of their engagement.

The idea of women combat pilots might seem strange to some people, but not to me. Women and flying always seemed a perfectly natural combination. I first remember flying when I was five years old. I didn't know the Piper Cub's pilot, but the copilot was my mother. I loved looking down on the patchwork fields near my hometown of Liberal, Kansas, where Mom was learning to fly with the Civil Air Patrol.

When I joined Air Force ROTC in 1976, I was told that women couldn't be combat pilots. My poor eyesight would have killed my hopes of military flying in any event. So I majored in Soviet area studies and spent my nine years in the Air Force as an air intelligence officer, working in fighter squadrons and finagling rides in every fighter, transport, and...
helicopter that came my way. And if I was just a passenger, just glorified ballast, I never doubted that in another generation my daughter or niece could be flying in the pilot’s seat. It didn’t occur to me then that if I were Russian, it might be my grandmother who was the fighter pilot in the family.

I was writing a manual on the development of Soviet tactics when I first saw references to Soviet women flying combat missions during the second world war. Later I asked some analysts at the Defense Intelligence Agency about the wartime women’s regiments. Most of them seemed to share the viewpoint of the author of a 1977 article, “Women in Combat,” that appeared in International Security magazine; if the Soviets had women’s aviation units, the author concluded, they were little more than an “exercise in public relations designed to impress the outside world.” At the time, I had no reason to doubt him.

When I began searching for more information about Soviet women pilots, I soon found there wasn’t much in English language sources. A few writers mentioned that Soviet women had flown in combat. Canadian historian Jean Cottam had translated a collection of memoirs by Soviet women pilots and written a few monographs. British writer Bruce Myles wrote an interesting (though fictionalized and undocumented) book called Night Witches. On the whole, little had been published in the West about Soviet women pilots, either during the war or after. If the Soviets had been trying to impress the West, they hadn’t done a very good job of it.

I went to the Library of Congress and began examining the sources in Russian, which were more revealing. I found biographies and memoirs of Soviet women pilots. A search of wartime Soviet newspapers and journals revealed an occasional story or photo. More photos were in unarchived collections at the Smithsonian.

The official history of the Soviet Air Force acknowledged that there were three full regiments of women fliers during the war: a fighter regiment, a dive bomber regiment, and a night bomber regiment. I also found references in some of the Air Army histories, and in the memoirs of famous aviation generals. The diversity and nature of the references, the photographs, and the time span of the sources all indicated that the women’s regiments were not mere propaganda but had really existed and fought.

Among all the stories, I found that of fighter pilot Lilya Litvyak the most compelling. Perhaps it was the tragedy of her short life: Litvyak was shot down at the age of 21, during one of the most horrendous air battles of the war. Perhaps it was the injustice of the lack of recognition for her achievements: she was a seasoned fighter ace and flight commander at the time of her death, with 12 personal kills and three shared kills. But, because her body couldn’t be found, she did not receive the honors due her until many years after the war (see “The Search for Lilya Litvyak,” p. 82). Somehow, for me, she came to symbolize all forgotten military women. Something about her became the theme for my research and drove me to continue.

Based on what I knew of the Soviet system, I didn’t expect it to be easy to find and interview people. But things have
changed. After a few weeks of blitzing Moscow with questionnaires, which I sent to friends working in military archives, and having requests passed on by word of mouth, I began to receive responses from veterans of the women’s regiments.

Polina Gelman was the first to answer. The thin envelope, decorated with a picture of red carnations, contained a small handwritten note and two typed pages. It was an incredible piece of luck: Gelman was one of the 30 women aviators who were awarded the Hero of the Soviet Union medal—the country’s highest honor—during the war (and, as her husband proudly told a friend of mine, “the ONLY ONE Jewish woman in the world” to have been so honored). The gold star of the Hero could be awarded for a single courageous deed or for a consistent record of performance in combat. Gelman had been a navigator with the women’s night bomber regiment—the “night witches,” as they were called. She explained that she received the Hero in recognition of her 860 combat flights.

Nearly all the flights were at night. I had seen a picture of Gelman taken in 1946 in Red Square. Posed between two women from her regiment, Gelman was half a head shorter than the others. Ironically, before the war she initially had been denied permission for air club pilot training because she was so short. “They were afraid that in difficult situations, for example in a spin, my feet wouldn’t be able to reach the pedals,” she wrote. “In the air club where this happened, there is now a flagstone that bears the names of Heroes who were once members of the club. Among those names, and the only woman’s name, is mine.”

Gelman was one of the many thousands of young Soviet women who sought to learn how to fly in the 1930s. One out of every three or four pilots trained in sport clubs was a woman. Still, there’s a big difference between sport and combat flying, even when, like Gelman, you used the same aircraft—the PO-2—for both.

Why did the Soviets decide to allow women to fly in combat when other countries, such as the United States, only permitted them to perform support duties? Was propagan-
In their published memoirs as well as their letters to me all the women said the same thing: the Soviet Union did not tell them to fight or even ask them to fight. The women themselves demanded to fight, and it took many months before the government agreed. Every woman I interviewed reported trying to join the army soon after the Germans invaded the Soviet Union on June 22, 1941. But at first, the Soviet military wouldn’t have them.

“A woman doesn’t want to be hidden behind some man’s back during difficult times,” Irina Rakobolskaya wrote to me. A former navigator and the chief of staff of the women’s night fighter regiments, Rakobolskaya is now a professor of physics at Moscow State University. I had written to her in California, where she was visiting her son—also a professor of physics, at Stanford University. She took time out from her vacation to write me a long letter—five large sheets of unlined paper, covered front and back with small, neat, almost vertical handwriting. She apologized for not having a Cyrillic typewriter handy; I would have been grateful if she’d written in crayon on paper napkins.

Rakobolskaya was a senior physics student at the university when the war broke out, but she immediately volunteered for combat duty. “At the start of the war, they only took into the Army those women who already had specialties like medicine and communications,” she wrote. Rakobolskaya began studying nursing at night—anything to get to the front.

Inna Pasportnikova, who eventually became Lilya Litvyak’s mechanic—what we might call a crew chief—found herself in a similar situation. Pasportnikova was a third-year student at the Moscow Aviation Institute when the war began. “I applied repeatedly to be sent to the front,” she recalled. “But it was to no avail. They suggested that I get training to become a nurse or a medical orderly.”

I’d read somewhere that Pasportnikova’s hands are disfigured from the burns, fuel spills, and frostbite she endured as a wartime mechanic. Yet she sent handwritten letters of many pages, as well as helped me to acquire copies of unpublished memoirs, official documents, poems, songs, and many of Lilya Litvyak’s letters.

It was not until October 1941 that Pasportnikova had the chance to become a soldier. “The telephone rang at midnight in the Komsomol committee at the Institute. They called us in the dormitory and told us that the famous pilot, Hero of the Soviet Union M. M. Raskova, was forming a women’s aviation unit,” she wrote. “There was a curfew in Moscow at the time and it was forbidden to move around the city at night. We had to wait until morning, or else we would certainly have run on foot through the night to the place where the organizing commission was working.” It seemed like a bolt from the blue.

Pasportnikova didn’t know that Raskova had worked many months to persuade the Soviet government to form women’s aviation regiments. Attractive and serious, her dark hair always in a bun, Marina Raskova was a famous navigator who participated in many record-setting flights during the 1930s. She and two pilots were the first women to be awarded the Hero of the Soviet Union medal (and the only ones to receive it prior to the war), when in 1938 they completed a harrowing Moscow-Far East flight that broke the international women’s distance record. Stalin himself presented the medal.

Many of the women veterans believe that Raskova used her influence to make a personal appeal to Stalin. Soon after the war began, Raskova had formally petitioned the Soviet Air Force to set up women’s regiments, but a decision was delayed for months. At that time, there was no military need for additional pilots. The Soviet Air Force had taken a terrible beating in the first few months of war: between June and September, some 7,500 Soviet aircraft were lost. But many of them had been destroyed on the ground. In October the Soviets had far more pilots than airplanes. It seems unlikely, then, that it was military desperation that led to the creation of women’s aviation regiments. In fact, it’s astonishing that the Soviets decided to allocate any precious aircraft to the women.

Given the circumstances, it seems most likely that it was the weight of Marina Raskova’s fame and influence, perhaps backed by Stalin’s personal interest, that persuaded the Soviet Air Force to create women’s regiments. Once permission was granted, events moved rapidly. They had to: the German offensive on the Soviet capital, Operation Typhoon, began on September 30. By early October the situation was grave.

Raskova was authorized to form a temporary aviation group, the 122nd, for the purpose of training women pilots, navigators, mechanics, and armorers. From the 122nd, three combat regiments would be formed: the 586th Fighter Aviation Regiment, the 587th Dive Bomber Regiment (later given the best qualified women pilots were assigned to combat flying duties. Valentina Petrochenkova (opposite, top), a pilot with the 586th Fighter Aviation Regiment, had been a flight instructor before the war. Others were trained as mechanics (left) and navigators, such as Hero of the Soviet Union Polina Gelman (above).
en the honorary designation of 125th Guards Bomber Aviation Regiment, and the 588th Night Bomber Regiment (re-designated the 46th Guards Bomber Aviation Regiment).

Polina Gelman was working with other university students digging anti-tank ditches outside Moscow when she heard that a women’s aviation unit was being formed. She submitted her paperwork the next day. Rakobolskaya heard only that young women were being asked to volunteer for some sort of military job, and she made her decision instantly.

"Who needed physics when the Germans were at the gates of Moscow?" she wrote. "I knew nothing about the fact that they were recruiting for aviation. I just wanted to fight."

Because thousands of women had been trained as pilots before the war, there was no shortage of volunteers for the women’s aviation unit. The main difficulty was that virtually no women had been trained as navigators or mechanics. As a result, the only women who became military pilots were those with the highest flying qualifications—women who had been instructors in the air clubs or who had flying experience in civil or military aviation. Of the remainder, those with the highest level of education were enrolled as navigators. The rest who were accepted, including many pilots, became mechanics, armorers, or staff personnel.

Ilya Litvyak was one of the women serving as instructor pilots when the war began. She had always wanted to fly. Her sister-in-law, Lyubov Orfieva, wrote to me, "When Lilya was fourteen she secretly began to attend the air club. At first they wouldn’t admit her, so she eavesdropped behind the door. The watchman chased her out. But she had a dream from her early childhood. She used to say, 'I'm going to be a pilot and a captain.'"

Eventually Litvyak was admitted to the air club and went on to advanced training as an instructor pilot. She trained 45 students before the war began. Like the other women, Litvyak applied repeatedly for military duty when the war started. She had been ordered to stay with her air club, which was being evacuated to the rear, and continue to train pilots. At the last minute she learned about Ras-kova’s group. After being accepted, she donned a man’s uniform many sizes too large for her and kissed her mother and brother goodbye.

On October 16, within a week after the initial announcement, the entire 122nd Temporary Air Group boarded a train and traveled 500 miles to the town of Engels, north of Stalingrad. They spent the next few months at the Engels Aviation Institute. After initial flight training, Ras-kova made assignments; each pilot was assigned to fighters, day bombers, or night bombers, and each navigator was assigned to a regiment.

The 586th Fighter Aviation Regiment was the first to receive its complement of combat aircraft, the Yak-1 fighter, and became operational in April 1942. It was assigned to the Air Defense Forces, with the mission of protecting strategic fixed targets. The night bomber regiment was next to go on active duty, in May 1942; it was equipped with PO-2 open-cockpit biplanes. The dive bomber regiment was held up until January 1943, due to an abrupt change of aircraft. The dive bomber crews had trained on the two-seat Su-2 but at the last minute were allocated the demanding three-seat Pe-2 dive bomber instead. The regiment had to wait for additional training and personnel.

In September 1942, one squadron from the 586th was detached to augment two front line regiments at Stalingrad. The group included a total of eight women pilots, together with their mechanics and armorers. Among them were Ilya Litvyak, Katya Budanova (another pilot who achieved ace status), and Inna Pasportnikova. Pasportnikova remembered that they received their transfer orders on September 10. On the 13th, according to archival documents, Litvyak scored her first two victories, becoming the first woman in the world to shoot down an enemy aircraft.

The situation both on the ground and in the air at Stalingrad was extremely intense," wrote Pasportnikova. "Endless columns of enemy aircraft bombed the city. The city was burning; for many kilometers the thick smoke overshadowed the sun." The air battles were furious. The Soviet Air Force had suffered heavy losses at Stalingrad during
the summer. When the women arrived at the battle-weary regiment, the male pilots were skeptical of their abilities (though they were quick to make use of their aircraft). “Several of them did not want to fly in the same group as the women on combat missions,” Pasportnikova recalled. “It was even more difficult for us, the mechanics: they could not accept us at all.”

The women fighter pilots had to prove their abilities in order to earn the respect of the men. It was difficult enough for a woman like Budanova, who was the type that is kindly called “strapping.” For Litvyak, it must have been virtually impossible; she was tiny, blonde, and stunningly beautiful. But though Litvyak had trouble gaining professional respect on the ground, she quickly set the pace in the air. Inna Pasportnikova remembered the day of Litvyak’s third mission at Stalingrad, when she achieved her first two kills: “Lilya was the wingman to the regimental commander. They spotted three Junkers 88s to the side of a bigger group of bombers. The leader decided to attack; Lilya followed his lead. She attacked so energetically that the bombers scattered and dropped their bombs. Taking advantage of this, her leader shot down one Ju 88, while Lilya killed a second.”

But the battle wasn’t over. Litvyak spotted her friend, Raya Belyaeva, attacking a Bf 109. But Belyaeva ran out of ammunition. Litvyak engaged the Messerschmitt and shot it full of holes. Shortly after, she found out its pilot was the highly decorated—and unbelieving—German ace. For a pilot newly arrived at the front to achieve two kills in a single day—one against a fighter ace—was a rarity. And Litvyak did it at Stalingrad, where, as Pasportnikova noted, “the numerical superiority of the enemy aircraft was indisputable.”

The women flying with male regiments faced antagonism, Rakobolskaya recalled that the fliers of her all-female regiment also initially had some problems with male attitudes. But “after the first six months of the war,” she wrote, “we always felt that the male pilots and the commanders treated us with respect.”

The consensus seems to be that at first the men were skeptical and often tried to “protect” the women aviators by attempting to keep them from flying. Gelman remembered an informal but intense effort among the crews in the 46th night bombers regiment to fly the most missions. On average, the women flew five to seven missions a night; Gelman recalls one night when she made 17 sorties. Men who were based at the same airfield jokingly tried to persuade them to slow down. “They said, ‘The less you fly, the longer you’ll live,’” Gelman told me. “But our regiment held first place in the Air Force for number of flights.”

The reason the night bombers were able to make so many flights had to do with the nature of their mission. The outmoded PO-2 biplane they flew was so vulnerable to enemy fire that it could not be flown near enemy lines during the
day. It had a top speed of less than 100 mph and a limited range and so was normally based on makeshift airstrips right at the front lines. At night, the PO-2s flew frequent, relatively short missions against front line targets such as troops and unit headquarters. The 46th also achieved a record number of flights because it stayed on combat duty for three solid years, from May 1942 to May 1945. “Without a single break, in the course of three years, without rest or leave, I flew an average of five to ten combat flights a night in the fire of ground batteries and in the blinding beams of searchlights,” wrote Gelman. Rakobolskaya also reported that while most regiments took occasional breaks from combat duty, the 46th never did.

The women apparently had to prove themselves to each new group of men. In late October 1942, Litvyak and three other women were transferred to another fighter regiment. Pavel Golovachev (later a major general of aviation and two-time winner of the Hero of the Soviet Union medal) wrote about their arrival in a 1963 collection of war memoirs. “Quite often one or another would ask to be wingman to the most experienced male fighter pilots, especially young Liya Litvyak. She appealed to many, including me. And we, every time, politely refused. Personally, to me it would have been unbelievably difficult to go through the death of such a wingman in combat. And after all, a woman!”

In this case, the men may not have wanted to “protect” the women as much as to avoid risking the blow to masculine pride that the death of a female partner might inflict. After all, when the men refused to take women as wingmen, it didn’t keep the women from flying in combat. They simply flew together, rather than with the more experienced male pilots. Only after the women demonstrated their skill did some of the male pilots agree to fly with them.

Litvyak and Budanova had a similar experience when they were transferred again in January 1943. When they arrived at the new air division, the staff had to decide which regiment they would be assigned to. Boris Yeryomin (later lieutenant general of aviation) commanded the reconnaissance regiment in that division. When he was asked to take the new pilots, he refused. Yeryomin wrote in his memoirs, “I could not even mentally imagine that I would send these girls into the rear of the enemy—and indeed if they ended up in my regiment, they’d have to fly reconnaissance. Sometimes it’s difficult to keep from being nervous when awaiting the return of an experienced ace, upon whose shoulders are a hundred combat flights.... And now I would have to send girls on such missions.... It wouldn’t sink into my head, and so I firmly decided: let them be offended, let them consider me an unfeeling fellow, but our regiment conducts too specific a combat mission, and therefore I could not take the girls.”

His reluctance was not based on any doubt of the women’s ability; Yeryomin later commented that Litvyak “was a born pilot. She had, I would say, a special talent for fighters, was capable and decisive, inventive and wary.” Pasportnikova still works with Yeryomin in a veterans’ group. She wrote, “Personally I believe that Yeryomin acted correctly: he very much wanted to preserve their lives. But, to the great regret of all who knew them, the war directed otherwise.”

As time passed and the number of casualties rose, the issue of whether men and women could work together in combat became critical. The 586th fighter regiment and 125th dive bomber regiment began to receive male replacements. There just weren’t enough women trained to fill some of the roles...
command and technical positions. Perhaps too, after Marine Raskova died when her airplane crashed in January 1943, the Soviet Air Force lost the impetus to train women for the regiments that flew more modern aircraft.

The 46th night bomber regiment remained entirely female throughout the war, "from the regimental commander down to the electrician," as Rakobolskaya noted. The veterans of this regiment are particularly proud of that. In one of Gelman's letters to me, she typed out in all capitals: "OF THE THREE WOMEN REGIMENTS FORMED FROM THE 122ND AVIATION GROUP, ONLY THE 46TH GUARDS...REMAINED PURELY FEMALE UNTIL THE END OF THE WAR." Beside the paragraph, she wrote by hand: "Important!"

When the first commander of the 586th fighter regiment, Tamara Kazarinova, was forced to leave in October 1942 (officially, for health reasons), a man, then-Major Alexander Gridnev, took her place. Wartime photographs show a rather handsome, dark-haired man with a strong, John Wayne sort of nose. "I arrived at the 586th, as they say, 'with a noose around the neck,'" Gridnev wrote me. Not because he didn't want to be there—at that point he was glad to be anywhere. He had been a commander of a fighter regiment when the war began, but in August 1941 he was arrested by the NKVD (later the KGB). The charge was sabotage: another pilot accused Gridnev of attempting to sabotage a mission in which the head of the NKVD was flying. Although he was later cleared of the charges, few Air Force commanders were willing to take him on at that point. When he was assigned to the 586th, it seemed to him a haven.

Compared to the other units, the 586th fighter regiment received relatively few awards. One possible reason is that for most of the war it was relegated to air defense duty, defending fixed targets rather than seeking out the enemy. It also flew many missions to escort transport aircraft flying VIPs in the battle area: at various times the 586th provided escort for such people as Nikita Khrushchev and Marshal Georgi Zhukov. In general, there were fewer opportunities for heroism in the 586th than there were in front line units. Gridnev feels, however, that the lack of recognition for the unit's accomplishments was due to a lingering ill will toward him on the part of some influential people.

The unit's pilots certainly chalked up achievements that warranted the Hero award. In the spring of 1943, two pilots of the 586th, Tamara Pamyatnykh and Raisa Surnachevskaya, were scrambled on alert. When they reached the target area, they discovered 42 German bombers. Gridnev was in the command post. "What was there to do?" he wrote. "I got on the radio and commanded them, 'Attack!'"

Attack they did. Driving a wedge into the German formation, the pilots managed to scatter the bombers, forcing them to drop their bombs well short of target. Moreover, each woman shot down two enemy bombers. The target of the German attack, a rail junction loaded with Soviet troops and fuel supplies, was unscathed.

"Some representatives from Great Britain saw all of this," wrote Gridnev. "They reported it to the King of England, and he sent the girls inscribed gold watches. But our own people never even found the time to give them the Hero. I believe this is one of the most distinguished victories of the entire war. They should hang two gold stars on each of them for this."

Although the pilots who remained with the 586th for the duration of the war did not receive the Hero, many other women did. Pilots accounted for 92 of the 92 Hero medals awarded to women for wartime valor, or, although the two or three hundred women aviators made up a small fraction of the 800,000 women who served in the Soviet military. The 46th night bomber regiment was truly exceptional. "Usually there were two or three Heroes in a regiment, but we had 23," noted Rakobolskaya. "There was no men's PO-2 regiment in which there were so many Heroes of the Soviet Union." When I asked her why the 46th achieved such a record, Rakobolskaya provided a simple explanation: "The title of Hero was conferred by law if a pilot or navigator completed more than 500 successful combat flights. Our Heroes, as a rule, had more than 700 flights." In addition to the number of Heroes received, an indicator of the quality of the women's service was the redesignation of two of the regiments with the honored "Guards" title.

Was there any difference between the performance of the women fliers and that of the men? Everyone I interviewed seems to agree on one thing: women flew at least as well as men. Gelman wrote that "the women, compared to the men, were very scrupulous about the fulfillment of each mission." Rakobolskaya said, "The women flew no worse than men, and in many respects better...after all, they were not required to serve. And that which is done at the call of the heart is always done better than that which is done out of obligation."

While many of the women were reticent about their performance, Gridnev was pragmatic. "Our experience showed that women fighter pilots bore G-loads and various non-standard situations better than the men; for example, G-loads during 360-degree turns, and exits from spins. They also had greater endurance during high-altitude flights without oxygen." He later told me about pilots like Raya Belyaeva and Evgenia Prokhorova, who were "a head higher than the men in all matters. There was never a man who could keep up..."
The Search for Lilya Litvyak

Lilya Litvyak was something of a maverick. From the time she sneaked into air club classes as a teenager and told her parents she was attending drama club meetings, she usually managed to have things her way. Her given name was Lidya, but she chose to go by Lilya instead. Even in the active Air Force—the Soviet Air Force, to boot—Litvyak followed her own mind.

Inna Pasportnikova, Litvyak’s aircraft mechanic, first noticed the pilot at a morning formation during the early days of the women’s regiment training at the Engels Aviation Institute. Litvyak was called out of the ranks by Marina Raskova, the unit commander. The reason was evident: Litvyak had removed the usual brown collar from her uniform and replaced it with one of white fur cut from her boot linings.

"Litvyak, what have you got around your neck?" “A goatskin collar,” she replied. “Why, doesn’t it suit me?”

Pasportnikova recalls that even at the front, Litvyak continued to stand out. “At one time it was the fashion to draw frightening designs on the aircraft—the mouths of snakes, tigers, or lions. I asked Lilya, ‘What should I paint for you?’ She said, ‘Flowers.’”

Litvyak loved a challenge. She had scarcely returned from being hospitalized with a leg wound when she took on the mission of destroying a German observation balloon. The balloon was used to direct artillery fire and had proven to be devastatingly effective. “Our male pilots had made several attempts to destroy the balloon,” says Pasportnikova, “but a solid wall of artillery fire prevented them from breaking through.” Litvyak tried a different tactic. “She flew deep into our territory, then crossed the front line where the enemy did not expect it. She approached the balloon from the rear, out of the sun, and remained unnoticed. She shot up the balloon at point-blank range on the first attempt.”

Whenever she returned after shooting down an enemy, Litvyak would swoop around the airfield, performing strictly forbidden victory rolls and high-speed, low-altitude passes. On the ground, regimental commander Nikolai Barmov (called “Father” by the pilots) would stand and curse at her. “After her circus number in the air, Lilya always asked me, ‘Did Father swear terribly?’” Pasportnikova recalls. “And if I said, ‘Terribly!’ she would hang her head and walk over to him with her post-mission report.” But Litvyak continued with her ad hoc airshows each time she made a kill.

Though Litvyak was a daredevil, she was also out to prove something. In 1937 her father had been arrested during Stalin’s purges and vanished into the gulag. Pasportnikova says that Litvyak never stopped believing in her father, but his arrest cast a cloud over the family name. “By her victories, she wanted to prove her devotion to the Motherland.”

According to both Pasportnikova and Litvyak’s sister-in-law, Lyubov Orifjeva, the pilot’s greatest fear was that she would be classified as “missing without a trace.” Anyone who disappeared in combat could be listed under that awful epithet, which carried with it the suspicion of desertion and betrayal. Tragically, that is precisely what happened to her.

On August 1, 1943, Litvyak’s Yak-1 regiment was fighting over the Donbass region on the southern front. Litvyak had already flown three sorties that day, shooting down a Messerschmitt Bf 109 on the third. On her fourth flight, her group of nine Yaks encountered a large flight of German aircraft—30 Junkers Ju 88 bombers escorted by 18 fighters. While attacking a group of bombers, Litvyak was jumped by a pair of Bf 109s that approached out of the sun. Her wingman, Alexander Yevdokimov, saw her descend into the clouds and thought she might have made an emergency landing. Another pilot, Ivan Borisenko, attempted to follow her down but could find no sign of her: no explosion, no parachute, nothing.

Litvyak’s aircraft went down in enemy-held territory. A report circulated that a woman in a flying uniform was seen riding in an open car with Germans, but few people believed this was Litvyak.

“I was long tormented by the question of how to prove that Lilya was killed heroically and did not turn out to be in captivity,” Inna Pasportnikova recalls. “There was only one possibility: to find her remains. And I vowed that I would do this while I lived.” It was a quest that would last nearly 50 years:

• Mid-August 1943: Litvyak’s regiment, the 73rd Guards Fighter Aviation Regiment, nominates her for the Hero of the Soviet Union medal, but the higher command refuses to approve the award until her body is discovered.
• Summer 1946: L. Zapriagaev, commander of the 73rd, sends people to search for Litvyak’s aircraft near the spot where she disappeared. It is not found.
• 1946-1968: Through letters and newspapers, Inna Pasportnikova establishes contact with several groups.
of schoolchildren in "Octobrist" and "Pioneer" groups who live in the Donbass region. Such children's groups often help search for unmarked graves, aircraft wreckage, and other war relics: they spend summer vacations following up reports of crashes and digging by hand to find relics.

• 1968: The newspaper Komsomolskaya Pravda revives the appeal to award Litvyak the Hero of the Soviet Union medal. Soviet Air Force headquarters informs the paper that her body still must be found before the award can be made.

• 1971: Young Pioneers from Middle School Number One in Krasny Luch in the Donbass become the main participants in the search for Litvyak. Inna Pasportnikova and members of her family participate in several of the summer searches. In all, more than 90 aircraft are found, as well as the remains of many unidentified pilots.

• 1979: The Pioneers find a crash site on a farm near Dmitrievka and are told that a woman pilot had been buried there but then moved in July 1969 to a common grave. The body is exhumed. The doctors can tell only that the pilot had been a short woman and had sustained a head injury. The schoolchildren determine that since the crash occurred in the Eighth Air Army's area and there was only one woman fighter pilot from the Eighth missing during that time, the body must be Litvyak's.

• March 31, 1986: Information from the Central Archives of the Ministry of Defense confirms that the woman pilot who crashed near Dmitrievka had to be Litvyak.

• 1988: Litvyak's name is placed on the common grave. The Ministry of Defense approves the changing of her records so that she is no longer listed as "missing without a trace" but is now "killed in action, 1 August 1943." A plaque is placed on Middle School Number One naming it for the pilot.

• May 5, 1990: Chairman Mikhail Gorbachev signs a document conferring the title of Hero of the Soviet Union on Lilya Litvyak.

The Yakovlev Yak-1

The chief Soviet fighter in the early 1940s, the single-seat Yak-1 had a top speed of 373 mph and a range of 582 miles.

An armorer with the 586th loads cannon shells for one of the regiment's Yak-1 fighters (below). Each Yak was armed with one cannon and two machine guns.

with Belyaeva in a maneuvering fight; they blacked out trying to out-turn her."

When asked whether the women's regiments were primarily used for propaganda, the women were either angered or mystified by the question. "They wrote a lot about us during the war in the front line newspapers," Rakobolskaya noted. But she pointed out that "at first, they gave us men's last names. It was like the regiment was classified secret. Later on, when we became Guards and the first Hero was awarded, they began to write more." It seems that far from being a propaganda sham, the women's regiments received what publicity they did because of concrete accomplishments.

"Crews from other regiments reported on our results, as did ground reconnaissance. It was easy to verify everything: the number of combat flights, of bombs dropped, of rounds fired," Gelman wrote. Rakobolskaya reminded me of the number of women Heroes, adding: "It would have been impossible to award a title like Hero simply for propaganda reasons." Several of the women alluded to all the women fliers who died. As Gelman emphasized, "After all, girls were killed; how could this have been propaganda?"

Even in Russia, the accomplishments of the women's regiments are not well known today. Virtually all the newspaper and magazine articles that have been published there appear only in March, in connection with International Women's Day. Many Russians have never heard of the women's regiments. Except for Litvyak, the women fighter pilots seem virtually unknown.

This may have been due to
The Soviets' wartime coverage of the women's regiments tended to emphasize stereotyped female behavior, an approach embodied in these obviously staged photos (above and left). Ironically, even as these women were proving themselves the equals of men as pilots, the legal status of women in Soviet society during the war was regressing. By the time the war was over, women in the Soviet Union had lost ground.

Inna Pasportnikova, Litvyak's wartime mechanic (opposite, small photo), remains devoted to the memory of her friend; in a recent photo (far right), Pasportnikova and the author pose by a portrait of the pilot.
Stalin's heavy-handed pro-natalist campaign after the war. The women's regiments were demobilized, along with the bulk of the Soviet Air Force. Although a few women remained in military aviation (primarily as test pilots or air traffic controllers), the vast majority of women veterans were discharged and sent home to work—and make babies. Mother Russia may wield a sword, but in the other arm she usually cradles a child.

In 1945, Soviet president Mikhail Kalinin told a group of demobilized women soldiers, "Do not talk about the services you rendered." Scholars of Soviet education found that after the war information about military women was removed from texts and lectures; even post-war Soviet novels played down or omitted women soldiers as characters. By the 1950s women were prohibited from entering Soviet military academies. Since women could no longer become soldiers, there was no reason for the government to glorify what its women soldiers had done in the past.

The late Vladimir Lavrinenkov, former colonel-general of aviation and twice Hero of the Soviet Union, flew with Litvyak and Katya Budanova at the front. In his 1983 memoirs, he says, "How rarely do we recall the names of the women fighter pilots! There weren't many of them, but their combat actions deserve the very highest appraisal. They disproved the erroneous opinion that the profession of air combat is unacceptable for women. Katya Budanova and Lilya Litvyak were, for us, dependable comrades-in-arms."

The gathering was held on May 2 in Moscow, in the park in front of the Bolshoi Theater. The day before, right-wing extremists had sparked a violent riot in the city; the day of the reunion was beautiful and peaceful. There were fewer veterans than usual, I was told; some were unable to attend because of the different currencies now used in the former Soviet states. Death had also taken a toll. Still, they came, some shuffling or walking with canes, and they sat with their old comrades and remembered the war.

During my visit, I met and re-interviewed every woman quoted in this article, as well as General Yeryomin. I obtained copies of hundreds of pages of official records of the regiments from the military archives. I visited the Military History Institute, where they insisted on interviewing me ("Tell us about the discrimination against women in the American military," I was asked. "Is it true that women are paid less than men?").

Inna Pasportnikova and I went to Volgograd; Colonel Gridnev himself came to meet us at the train station. He seemed greatly diminished from his wartime photos. Yet when we talked, he spoke forcefully, peering at me intently, blue eyes beneath bushy brows, over the rim of his spectacles. Gridnev is dedicated to setting the record straight.

Later, Inna and I stood together on the east bank of the Volga River, at dusty Srednyaya Akhtuba—the airfield where Lilya Litvyak made her first two kills. "It hasn't changed at all," said Inna. A tall woman with soft white hair, she shook her head in disbelief. "The grass was dry and brown instead of green. But it was just like this. There wasn't a single bush here, only stickers and tumbleweeds. They brought water out to us on camels, you know." She smiled, paused a moment, and pointed: "The command post was there. That's where they took the German ace that Lilya shot down."

More than 50 years have passed, and now many governments are reevaluating the role of women in the military. Canada, France, and, more recently, the United States have opened combat aviation to women. Some people still don't think that wings, women, and war are a good mix. But then, they didn't know Lilya Litvyak—or the other Soviet women who flew. —V