In World War II, Soviet women were air combat pioneers.

Not Just Night Witc



L-r: Russian pilots Lt. Galina Burdina, Lt. Tamara Pamiatnykh, Lt. Valeriya Homyakova, and Lt. Valentina Lisitsina discuss a recent sortie in front of one of the 586th Fighter Wing's Yak-1 aircraft.



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ho was the first woman to fly in combat? Until 1993, American women were barred from flying y pilot Mai Marie

combat missions. Army pilot Maj. Marie T. Rossi, however, flew support missions in Desert Storm and was killed in 1991 when her CH-47 helicopter crashed. Her headstone in Arlington National Cemetery reads, "First Female Combat Commander To Fly Into Battle."

Then-Lt. Col. Martha E. McSally, an Air Force A-10 pilot and later the first woman to command a USAF fighter squadron, flew combat patrols over Iraq and Kuwait in early 1995 and is often described as the first woman to fly combat missions. Col. Jeannie M. Leavitt became USAF's first female fighter pilot in 1993, as a first lieutenant, and was later the first woman to graduate from the Air Force Weapons School and the first female fighter wing commander. She flew combat missions during Operation Southern Watch in 1996.

But America is a latecomer when it comes to employing women in combat aviation.

Many sources list Turkish pilot Sabiha Gökçen, the adopted daughter of Mustafa Kemal Atatürk, with becoming the world's first female fighter pilot in 1936 and with flying combat missions in 1937. However, Gökçen was not the first female fighter pilot or even the first woman to fly in combat. Russian women pilots were the first in fighters, the first in combat, and the first to be honored with their nation's highest military honors.

Russian women first flew reconnaissance missions in World War I—two as civilian pilots and another whose male disguise was discovered when she was wounded—making them the first women pilots in combat.

In 1925, Zinaida Kokorina was heralded as the Soviet Union's first female military pilot—the first woman in the world to hold both military rank and fly military aircraft.

Thousands of young women learned to fly in the 1930s in paramilitary Osoaviakhim clubs that also taught parachute jumping and marksmanship skills. Some of these women entered the Soviet air force (Voenno-Vozdushnye Sily, or VVS). In 1938, three female aviators received the Hero of the Soviet Union medal from Stalin himself for their achievements in a long-distance flight they made from Moscow to Komsomolskon-Amur.

One, VVS navigator Lt. Marina M. Raskova, had bailed out of their iced-up

aircraft, because her location in the nose was hazardous in a forced landing, then endured 10 days in a Siberian forest before being rescued. Raskova's subsequent memoir made her a Soviet celebrity on a par with Amelia Earhart in the West.

At least two women flew bombers in the Russo-Finnish War in 1939-40, including one who flew well into her pregnancy.

Women made their real mark in Soviet aviation during World War II, though. In what Russians call the Great Patriotic War, more than 1,000 women served as pilots, navigators, and ground crew, a small but important part of the 800,000 women in the Red Army. Training began in October 1941 for three all-female combat units: the 586th Fighter Regiment, the 587th Dive Bomber Regiment, and the 588th Night Bomber Regiment.

WHY THEY FOUGHT

Major Raskova began fighting for the creation of women's units from the day the Germans invaded Russia in June 1941. Like Jacqueline Cochran and Nancy Love in the US, Raskova was a tireless proponent for tapping the skills of female pilots to help the military in its time of need. Unlike the Americans, Raskova advocated women for combat roles. While British and American women pilots freed men to fight by taking over ferry duties on the home front, Soviet women fought on the front lines.

Raskova made the rounds at VVS headquarters with a petition and a suitcase full of letters from women who wanted to fly and fight. In September 1941, she got permission to form three all-female regiments, including aircrews, ground crews, and support staff.

Many think the Soviets allowed women to fight out of desperation, but this doesn't explain the decision. Germany had destroyed thousands of Soviet aircraft during Operation Barbarossa, but most of those aircraft were destroyed on the ground, and most of the pilots survived. In the autumn of 1941, when the women's aviation units were being formed, there was no shortage of pilots. Some men in the VVS resented the idea that untried women would be given late-model aircraft, while experienced male pilots had to wait for production to catch up.

By mid-October 1941, Raskova's team had interviewed and selected a thousand volunteers. As the Germans shelled Moscow, the group boarded a train for a training base 500 miles to the southeast.

The recruits were mainly university students in their late teens and early 20s. Some had thousands of hours of flight

The "Night Witches"

"Night witches" has become a popular moniker for all Soviet female pilots of World War II, but is properly applied only to the women who flew night bombers. Germans reportedly came up with the name, but how would German troops have known that women were flying the Po-2s that bombed them?

Only one of the dozens of Soviet night bomber regiments was staffed solely by women; the rest were primarily male. Moreover, only one group of women flew night bombers, while the rest were in other kinds of aviation. But the term has caught on, possibly because of the 1981 book *Night Witches* by Bruce Myles. Public interest was renewed in 2013 when Nadezhda V. Popova, a prominent political figure in the former Soviet Union and the former deputy regimental commander of the 46th Guards, died, prompting a number of newspaper and magazine articles.

"Night Witches" is used in the title of many Web pages, graphic novels, role-playing games, and various TV and film projects.

time: instructor pilots, air show pilots, civil aviation pilots, and some already in the VVS. Others had only Osoaviakhim training. There was such a large number that many had to settle for navigator slots.

Of the three regiments formed by Raskova, only one remained all-female throughout the war: the 588th Night Bomber Aviation Regiment, later redesignated the 46th Guards—the so-called "Night Witches."

An undetermined number of women served scattered throughout the VVS



and air defense forces (PVO) in mostly male units; these included female pilots, navigators, and gunners who flew in transports, fighters, and the II-2 Shturmovik. Some people mistakenly refer to all these women as "Night Witches," but fewer than a third of the women served in night bomber units.

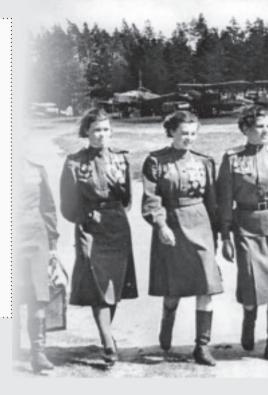
The 46th Guards flew more than 24,000 combat missions. The regiment was continuously in combat from May 1942 until May 1945 and flew at Stalingrad, near the Black Sea, in Byelorussia, and at Warsaw and Berlin.

The 46th Guards flew the Polikarpov U-2, an outdated, open-cockpit two-seat biplane. The resourceful Soviets turned plowshares into swords by converting biplane crop dusters into bombers. The Po-2 (as the U-2 was renamed in 1944) was a ubiquitous trainer and short-distance transport—at least 30,000 were built—but poorly suited for combat.

The 46th Guards was just one of many night bomber regiments. These were created during the defense of Moscow in 1941, with Osoaviakhim graduates flying various kinds of converted trainers to harass enemy troops and attack targets near the front lines. If they didn't hit much, at least they caused the enemy to lose sleep.

Due to their short range, these aircraft had to be based close to the front, often at the roughest fields. The wood-frame Po-2 was fragile and practically defenseless against attack, so it was flown primarily under cover of darkness. Slow, with a top speed of some 90 mph, they were retrofitted to

Marina Raskova in 1938. She fought tirelessly—and ultimately successfully—to put women pilots in the cockpits of Russian bombers during World War II.



carry 500 pounds of bombs and a machine gun. Crews didn't start wearing parachutes until late 1944, because parachutes were in short supply in the early years, they added weight, and every pound counted.

GETTING HIT

A typical mission lasted 30 to 50 minutes, and crews flew as many as 14 or more missions a night. They flew single-ship; nighttime formations were dangerous. However, they often flew in sequence, with aircraft three to five minutes apart, ingressing at some 3,000 feet, and bombing at 1,300 feet or higher, throwing out a few flares to light up the target, then egressing at very low altitudes. When possible, crews would cut their engines and bomb from a glide, to improve surprise and survivability. When enemy searchlights came on, the next aircraft in line would try to take them out.

In late 1942, pilot Nina Raspopova and her navigator Larisa Radchikova, while flying a night bombing sortie against a German bridgehead on the Terek River, were hit by anti-aircraft fire. Raspopova recalled, "My left foot slipped down into an empty space below me; the bottom of the cockpit had been shot away. I felt something hot streaming down my left arm and leg-I was wounded." Raspopova managed to get the airplane down. Both women were injured-Raspopova was peppered with wooden shards from the shot-up aircraft-but got back to friendly lines. After a few weeks of recuperation, they were flying again.

After initial recruitment by Raskova in 1941, the VVS didn't create a pipeline



A lineup of "Night Witches" from the 46th Guards.

to bring more women into aviation. The innovative 46th, however, remained allfemale by creating its own pilot-training program. 46th Guards chief of staff Irina Rakobolskaia explained, "We turned navigators into pilots, trained new navigators from among the mechanics, and made armorers of the girl-volunteers who were just arriving at the front. ... The regiment flew combat missions at night, and the training groups worked during the day." Several pilots and navigators in the 46th Guards completed more than 800 combat sorties during the war.

The 587th Bomber Aviation Regiment,



later designated as the 125th Guards, is the least known of the three units. The 125th Guards completed 1,134 combat missions. The unit flew at Stalingrad, on the Don Front, and in the North Caucasus, Byelorussia, Lithuania, and Poland. Twenty-two flying personnel died during the war.

The 125th Guards become operational in January 1943, seven months after the first two units. The delay resulted from an upgrade from the Su-2 to the more sophisticated Pe-2 bomber, regarded as one of the best dive bombers of the war. The twin-engine Pe-2 was tricky to fly, however, and required an additional crew member over the Su-2. Training time was extended and Raskova had to scramble to get gunners and additional support personnel. To speed things up, she agreed to accept male personnel for most of these new slots.

Raskova herself took command of the 125th Guards. The unit was ordered to Stalingrad in December of 1942, but winter storms caused two of its squadrons to split up along the way. In early January 1943, Raskova tried to take a three-ship formation to its new base, but the weather quickly turned bad. While the other two aircraft successfully crash-landed, Raskova's airplane crashed, killing her and three others on board. Her death devastated not just the 125th, but the women she had trained.

Stalin published a tribute to Raskova, and her remains were interred at the Kremlin.

The 125th Guards regrouped and began combat operations in late January. A new commander was brought in: Maj. Valentin Markov, who had already commanded a bomber regiment. The transition was rocky; many of the women resented that Raskova was replaced by a man, and Markov, recently recovered from war wounds, wasn't happy about his new assignment. He warned the women, "There will be no sort of allowances made because you are women, so don't expect them." But he became a respected leader, and soon the women started calling him batya, or "dad."

Markov later noted, "During the war there was no difference between this regiment and any male regiments. We lived in dugouts, as did the other regiments, and flew on the same missions, no more or less dangerous." He concluded, "If I compare my experience of commanding male and female regiments, to some extent at the end of the war it was easier for me to command this female regiment. They had the strong spirit of a collective unit."

The 586th Fighter Aviation Regiment was the first group to begin combat operations, but it was sent to air defense (PVO) rather than to the VVS. Its fighter pilots, flying Yak-series aircraft, were assigned to patrol rear areas rather than frontline battles. When the unit grew from two squadrons to three, the 586th was assigned male pilots to make up the difference. The regiment flew in Russia and Ukraine and ended the war in Hungary. The 586th completed 4,419 combat missions and destroyed 38 enemy aircraft in 125 air battles.

While relations within the 46th were generally harmonious, there were conflicts and controversies in the 586th. The first commander, Maj. Tamara Kazarinova, wasn't well respected. The 586th had been given the cream of the crop—the best aerobatic pilots and more of the experienced pilots than the other units. These experienced pilots complained about being assigned a commander who

What Happened to Liliia Litviak?

Smart, attractive, charismatic, and missing in action—it's no wonder that Liliia V. Litviak has become the source of so much speculation. Born Lidiia Litviak, she preferred to call herself "Liliia" and is called the top female ace of all time. She became the focus of popular books and websites in several languages.

Litviak was shot down in air combat on Aug. 1, 1943, three weeks before her 22nd birthday. Because her crash site and body were not found during the war, she was listed as missing in action. After extensive searches, in 1979 the body of an unidentified female pilot who had crash-landed on the right date in the right area was located. Based on the physical attributes of the remains and by cross-referencing with personnel records the body was identified as Litviak's. In 1988 her official records were changed to "killed in action," and in 1990, Mikhail Gorbachev awarded her Hero of the Soviet Union.

Nevertheless, stories abound speculating that Litviak was not killed in the war but defected to the Germans and ended up living in Switzerland. There is little substance to these stories.



Night Witches Rufina Gasheva (I) and Natalia Meklin, both awarded Heroes of the Soviet Union, near a Po-2 bomber. Gasheva made 848 sorties as copilot, Meklin flew 980 combat sorties.

wouldn't or couldn't fly the unit's aircraft and petitioned the division commander to replace her.

In September 1942, Kazarinova effectively silenced the complainers, transferring eight pilots to duty with units at Stalingrad.

Soon after, pilot Lt. Valeriia Khomiakova—another of those who complained about Kazarinova's leadership—became the first woman in the world to shoot down an enemy aircraft at night.

On Sept. 24, 1942, she destroyed a Ju-88 bomber, the first kill credited to the 586th. Less than two weeks later, Khomiakova died in a night takeoff under questionable conditions. Many blamed Kazarinova, who was removed from command and reassigned to PVO headquarters, where some believe she made it her mission to exact revenge on the 586th.

Kazarinova was then replaced by a male commander, Maj. Aleksandr Gridnev, who was also controversial. He'd been arrested for political reasons. Returned to duty, his "punishment" was to take command of the 586th. However, like Markov, Gridnev quickly gained the respect and affection of his subordinates.

The 586th pilots weren't in the thick of things, but achieved some notable victories. Raisa Surnachevskaia and Tamara Pamiatnykh were scrambled against a group of 42 German bombers and shot down four. The 586th regularly escorted important transport flights, including one taking political officer Nikita Khrushchev to inspect a POW camp at Stalingrad.

WHAT HAPPENED TO THEM

Several more of the most skilled pilots in the 586th died under mysterious

circumstances. Except for those who remained in the VVS after the Stalingrad deployment, all the pilots who had petitioned for Kazarinova's dismissal were dead within a year. We may never know the truth about whether these deaths were engineered by Kazarinova or simply the toll of war. PVO headquarters assigned them unnecessary missions in dangerous weather conditions that caused the death of at least one pilot, and another was killed while test-flying a defectively repaired aircraft, according to Gridnev.

The 586th was nominated to receive Guards designation, but after photos, films, and documents were prepared, and commissions made their recommendations, the documents disappeared and the unit never got the title. Kazarinova was one of the PVO staffers who had access to those files. Gridnev believes she simply destroyed them.

No pilots in the 586th achieved ace status—five enemy aircraft shot down—but several who left the unit for the VVS did.

The first women to shoot down enemy aircraft were Liliia V. Litviak and Raisa V. Beliaeva, who scored kills on Sept. 13, 1942, at Stalingrad—11 days before Khomiakova achieved her night shootdown. Litviak and Beliaeva were among the eight female pilots transferred from the 586th, along with their ground crews, and assigned to two different VVS regiments.

Litviak and Katia Budanova are the most famous of the female fighter pilots. Both preferred frontline flying to air defense. They petitioned to stay with the VVS after Stalingrad and were transferred first to the 9th Guards, then the 73rd Guards regiment. These units were in intense combat in 1942-43. Budanova was killed in July 1943.

Litviak too became a casualty of war on Aug. 1, 1943, when she was shot down during an intense air battle. Her remains were identified decades later, and she was finally awarded the Hero of the Soviet Union by Mikhail Gorbachev in 1990. Litviak racked up as many as 12 personal kills (including an artillery spotting balloon) and three shared kills, making her the top-scoring female ace of all time.

Budanova attained at least six personal and four shared kills and was named a Hero of the Russian Federation in 1993. Litviak's achievements, and even her death, have become the subject of much speculation and controversy.

There were many other noteworthy Soviet female pilots who didn't fly in "Raskova's regiments." Ekaterina I. Zelenko, a veteran of the Russo-Finnish War, was killed when she rammed a German fighter in 1941. Valentina S. Grizodubova, who flew with Raskova on that 1938 longdistance flight, commanded the 31st Guards Bomber Aviation Regiment, which flew thousands of partisan resupply missions. Anna Timofeeva-Egorova flew the II-2 Shturmovik ground attack aircraft. She was shot down and badly wounded and survived being a POW.

Women aviators in the Soviet Union flew the same missions as men, in the same kinds of aircraft. Although they encountered some discrimination, on the whole they were well-accepted and respected by their peers. There was little difference in the performance or morale of integrated units compared to all-female units.

Despite their achievements, most women were discharged from the Red Army after the war, including the aviators. A few female pilots kept flying but the VVS did not continue to recruit and train women. Although some books and memoirs appeared, the experiences of the "Night Witches" and other female pilots were largely forgotten in the Soviet Union and are little-known in modern Russia.

Few women fly in the Russian air force today. The Soviet Union was the pathfinder in the 20th century, but the United States has set the standard for women in military aviation in the early 21st century.

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