In 1961 Gagarin's flight, despite the surrounding confusion and suspicions, had been all that Khrushchev and Korolev could have hoped for. It had reasserted Soviet space supremacy and had upstaged the much shorter American Mercury space hop a few weeks later. The new American President, John Kennedy, in office only three months, had been given a stunning demonstration of Soviet technological virtuosity.

So what should come next? For Korolev, the answer was simple: longer and longer flights, testing human reactions to extended periods of weightlessness. The second cosmonaut would spend a full day in space, followed by a trip of several days. Eventually, men could spend ten to twelve days in orbit. Such cosmonauts need not even be jet pilots, but could be doctors or scientists.

For Khrushchev, however, this just wouldn't do. Breaking one space record after another would soon lose its public appeal, especially at a time when U.S. astronauts would begin orbiting earth inside Mercury capsules. No, something more impressive, something spectacular, would have to be produced -- if Korolev's budget was to be approved.

By the time the second cosmonaut was launched in August 1961 (evidently timed to coincide with the building of the Berlin Wall), follow-on plans had been completed. Korolev would get his desired three-day flight in 1962, as long as he launched a *second* Vostok into a nearby orbit -- as Khrushchev demanded. Korolev would also get his week-long flight in 1963, but only if it was pert of a sensational space extravaganza involving the launching of a woman into space. It was something Korolev had never considered, but Khrushchev demanded it be done -- and he signed the checks.

The problem was, what sort of woman? There had not been any women jet pilots considered for the 1960 class, since there were very few women pilots. But there were some highly qualified women doctors and engineers in the space program, and they seemed likely choices. However, the woman-in-space project was Khrushchev's idea from the very beginning, and he set the standards: she must be an *ordinary* Russian girl, a factory or farm worker, whose flight would demonstrate that anybody at all could go into space under socialism. No elitist intellectual here: she must have the common touch to fulfill plans Khrushchev had for her.

The selection process, under the direction of veteran cosmonaut Gagarin, began in the summer of 1961. Thousands of letters had poured in after the first Vostok flight from would-be space-farers, and many of them were from women. At first, these letters had been stashed away; now that women cosmonauts were needed, the sacks of mail were dug out of storage and the letters were screened for likely candidates. Eventually, after extensive investigations and interviews, four were chosen.

The one named Valentina Tereshkova is the only one we know about, although the first names of two others, Tanya and Irina, were published many years later. Of the fourth young woman, not even her name is known, although one foreign journalist claimed it was Ludmilla -- and that will have to do.

Tereshkova was twenty-four years old when the call to Moscow came. She had been born on a collective farm near the ancient Russian town of Yaroslavl in 1937, soon after the worst famines of the forced collectivization of the peasants had eased, to be replaced by political purges. Her family survived (there was no hint of political pathology in her pedigree), but her father was

killed fighting Germans when Valentine was six years old. With her mother and older sisters she moved into Yaroslavl, and after high school she took a job as a spindler in a textile factory.

Tereshkova was active in the Young Communist League at her factory, and eventually became the chapter secretary. She also took up skydiving and made several dozen jumps between 1958 and 1961.

When her letter to Moscow had been answered by a series of interviews and medical exams, and ultimately by a trip to Moscow for the final screening, she carried out her first space duty: to maintain secrecy. In November 1961 she moved to a training camp after telling her friends, her colleagues and even her mother that it was for special studies connected with a women's precision sky-diving team which would soon enter international competition. (Her mother learned that Valentine was a cosmonaut when the flight was announced over *Radio Moscow*.)

The four young women received mixed reactions from the male cosmonauts. (The reactions from the cosmonauts' wives have never been documented.) Some thought the idea was wonderful. Others were paternalistic: "Space flight is no picnic," one told a journalist. "It will be hard on them."

The training was arduous since the planned flight was less than a year and a half away. There were months of classroom work, physical training and parachute jumps. The women were commissioned second lieutenants in the Soviet air force and went through an extensive jet acrobatic program in two-seater Mig trainers (they never soloed). In one respect their training differed from that of the men, although no mention has ever been made of it in Soviet sources: the men knew they competed for each flight assignment, but that barring any medical disability or behavior slips, they would *all* eventually fly in space; for the women's program, created by Khrushchev's edict for Khrushchev's purposes, there was never any intention of making more than one flight -- so the competition must have been keen and the pressures intense.

And as the months went by, the male cosmonauts came to understand the purpose of the female detachment. The piloting skills which had earned for the men their chances of a ticket into space had been set aside for the women. It soon became apparent that the women had been selected precisely for their *lack* of "elitist" qualifications. And although the medical and psychological standards were comparable, the criteria of ideological purity and correct class origin had even more stringently been applied. The women had been picked not with the space mission but with the post-mission ceremonial duties foremost in mind.

Years later, during the brief Apollo-Soyuz cosmic camaraderie in the mid-1970s, some cosmonauts talked freely with their American colleagues about the blend of amusement and condescension they had come to feel toward those women. What, the men had feared, would become of their macho reputations when it was realized that *anybody* could fly into space inside an automatic remote-controlled Vostok? The cosmonauts had soon recognized the woman-inspace project as the political price Korolev had to pay in order to receive Khrushchev's backing; their mistake may have been in thinking it was a temporary aberration, a necessary chore to be gotten out of the way so the *real* space program could carry on. As it turned out, their concept of an aberration was Khrushchev's idea of normality: the cosmonaut program existed to provide him with politically exploitable space spectaculars, and that was why he signed the checks.

Throughout 1962 and early 1963, public statements by touring cosmonauts and private news leaks to Western journalists alerted the world to the coming flight: "We will pave the road into space together," cosmonaut Popovich told one women's club in early 1963. The women of the world were ready.

But who was it they were waiting for? Which of the four would be the one to go? As the launch date approached, the time came to pick the primary pilot and her backup (or "double").

According to the official version of the story, Tereshkova had been the obvious choice all along -- even though a strict training rule had been that the actual pilot was not to be notified until shortly before the flight, to keep *all* the candidates at their peak readiness.

Several unofficial sources both inside and outside the Soviet Union have claimed that the leading candidate for the flight had actually been the girl "Ludmilla." Valentina, according to these unconfirmed but consistent accounts, had been the second choice, the double. Shortly before the launching on June 16, 1963, "Ludmilla" is supposed to have been medically disqualified, and Valentine stepped in. (I can personally testify to Tereshkova's sensitivity regarding *her* backup pilot. In 1976 at a press conference at the NASA Space Center in Houston, I asked her who and where the other three woman cosmonaut trainees were; immediately she demanded that I be expelled from the meeting room -- and I was.)

Whatever the truth of these suspicions and rumors, the other three women have vanished almost without a trace. In a series of Soviet space publicity movies, the whole quartet, three brunettes and a blonde, appears in the distance or from behind. Beyond those views, and the first names of two of them, nothing more is known about these losers in the first Miss Outer Space contest.

On June 16, 1963, Tereshkova was launched aboard Vostok-6. Her launch was part of a second group-flight of two separate Vostok capsules. The first, the previous August, had seen cosmonauts Andrian Nikolayev and Pavel Popovich ride their spacecraft in parallel orbits a few miles apart. Two days before Tereshkova's blast-off, the Vostok-5 (with Valeriy Bykovskiy) had been put into orbit, but her Vostok-6 was later sent up on an entirely different orbital, path, not in the same plane at all. At one point the ships passed each other at a range of three miles, but they then drifted apart and soon there were thousands of miles between them. This odd flight path perplexed Western observers at the time and has never been explained.

But the navigation details were unimportant. A *woman* was now in space! And what a fine, typically Russian girl, too! Like the earlier cosmonauts, Tereshkova was allowed to choose a bird's name as a radio call sign. She chose *Chaika*, or Sea Gull. Cheers and excitement circled the globe almost as quickly as Sea Gull's spaceship. Whatever their national or political leanings, women around the world reacted with pride and exuberance when Sea Gull, a simple everyday Russian girl, broke into the male preserve of "manned" space flight.

An important part of the flight plan was to send greetings to the nations she flew over and to underscore the reasons she was able to make the flight. "Warm greetings from space to the glorious Leninist Young Communist League which reared me," she broadcast. "Everything that is good in me I owe to our Communist party and the Young Communist League."

Tereshkova soared on. Originally a flight lasting a single day had been scheduled, with two possible day-long extensions if all went well. These extensions were allowed after she seemed to make a good adjustment to weightlessness. Years later, there were malicious rumors about how she had fainted, or had become delirious, or had vomited all over the cabin as she screamed in terror. Such ugly accounts sound like exaggerations, but it is entirely possible she did throw up her dinner once or twice. (Many of the male astronauts and cosmonauts did so too during the first few hours of their flights.) Whether or not she panicked momentarily remains a state secret, but she did complete her three-day flight in reasonably good shape.

To return to earth, Tereshkova allowed the Vostok autopilot to line up the spacecraft and fire the braking rocket engine. After passing through the flames and deceleration of atmospheric entry, the capsule stabilized under a small parachute, and Tereshkova was ejected through the side hatch. She completed the descent on a personal backpack parachute. In the few moments of that silent final descent, she must have felt very proud of herself -- as she had every right to. She

had earned a new place for herself in world history, a place which was to ever more deny her the ordinary right to make any more parachute jumps or to do anything else which seemed too risky.

The mission was the propaganda triumph Khrushchev had planned. He crowed the loudest: "Bourgeois society always emphasizes that woman is the weaker sex. That is not so. Our Russian woman showed the American astronauts a thing or two. Her mission was longer than that of all the Americans put together." Other broadcasts stressed that last theme, as for example *Radio Berlin* (East): "This single fact [seventy hours for Sea Gull versus fifty-five hours for six Mercury flights] is evidence of the great superiority of Soviet science and technology compared with the United States, and of the ever-growing superiority of the socialist order of society over capitalism altogether."

The women's angle was embellished by Tereshkova herself: "Since 1917 Soviet women have had the same prerogatives and rights as men. They share the same tasks. They are workers, navigators, chemists, aviators, engineers. And now the nation has selected me for the honor of being a cosmonaut. As you can see, on earth, at sea and in the sky, Soviet women are the equal of men."

And in the United States, a lot of people agreed. The wife of Senator Philip A. Hart (Democrat-Michigan), herself a qualified pilot, was quoted by UPI as saying, "All it shows is that Russia is giving women a chance and we're not. [The United States] is one hundred years behind in using the full abilities of women." Senator Ernest Gruening (Democrat—Alaska) criticized NASA on the Senate floor for its indifference to the use of women as astronauts; he read an article by Clare Boothe Luce, former congresswoman and wife of the publisher of *Life* magazine, which claimed that "the Soviet Union has given its women unmistakable proof that it believes them to possess the same virtues [as men]. The flight of Valentina Tereshkova is, consequently, symbolic of the emancipation of the Communist woman. It symbolizes to Russian women that they actively share (not passively bask, like American women) in the glory of conquering space."

Such complimentary comments measure up poorly against later Soviet actions and Soviet statements. One would be tempted to say that once the gimmickry of Tereshkova's flight had been accomplished, the Soviets reverted to a male chauvinism which should have made such Western spokespersons choke on their fatuous praises. Cosmonaut Lconov, for example, expressed it this way in an interview in 1975: "When we analyzed the results of her flight afterward, we discovered that for women, flying in space is a hard job and that they can do other things down here [laughs]... After training, she will be twenty-eight or twenty-nine, and if she is a good woman she will have a family by then. Now, you don't subject a mother to such severe physical loads that go with the training, aside from physical tensions." The following year, Tereshkova's husband elaborated: there never were any more spacewomen "because this kind of work is tough. The mission program makes big demands on her, especially if she is married. So nowadays we keep our women here on earth. We love our women very much; we spare them as much as possible. However, in the future, they will surely work on board space stations, but as specialists -- as doctors, as geologists, as astronomers and, of course, as stewardesses." Cosmonaut chief Shatalov told Russian newsmen in 1980 that space flight was too demanding for women: "In such conditions we just had no moral right to subject the 'better half' of mankind to such loads."

Tereshkova herself would eventually proclaim much the same thing: "I believe that a woman should always remain a woman and nothing feminine should be alien to her," she wrote in 1970. "At the same time, I strongly feel that no work done by a woman in the field of science or culture or whatever, however vigorous or demanding, can enter into conflict with her ancient 'wonderful mission' -- to love, to be loved -- and with her craving for the bliss of motherhood."

But all these comments would come later. In 1963 the only things that were important were the image of the brave young woman and the uses to which such an image could be put. The eighteen months of training and three days of flight had been arduous enough, but now Tereshkova began the work she had been intended for. Soon after landing, she flew back to Moscow just in time to address a Soviet-sponsored international women's peace congress, and then began a world tour through India, Pakistan, Mexico, the United States, Cuba, Poland, Bulgaria and points between. While the three other women space trainees were shuffled out of the space program forever (presumably with appropriate cover stories so that they could explain where they had been for a year and a half), Tereshkova rocketed from glory to glory. She assumed dozens of ceremonial posts and moved into the office of the president of the Committee of Soviet Women on Pushkin Square in Moscow. She parroted the official Moscow line with a degree of charm and grace which had never been seen before in Russian diplomacy. She did her job very, very well.

There was one more task to perform, and Khrushchev probably had a hand in it as well. During the final months of training, the Vostok-3 pilot Nikolayev had been assigned to help coach the women's group. He was the only bachelor; all the women were single (had that also been a selection factor?). As later recounted, a cosmic romance sprang up during the training period -- and lot it was Nikolayev's girl friend who was picked to make the flight.

Their wedding the following November was the Moscow social event of the year. The Soviets have always treated their cosmonauts like royalty or Hollywood stars, and this time they outdid themselves in the lavish pageantry. Khrushchev gave the bride away and grinned uncontrollably all day.

Now, some things about all this still seem strange. The odds were three to one against the single cosmonaut bachelor falling in love with the future spacewoman. Their only child, a daughter named Yelena, was born seven months after the wedding; since Khrushchev's overthrow, they have reportedly not even lived together, and in official Soviet cosmonaut group portraits they are nowhere near each other.

There's no way to tell if this was just a love match that went sour or some callous Khrushchevian ploy arranged to capitalize on cosmonaut popularity -- which cannot be undone for fear of embarrassing the Soviet Union, at whatever personal cost to the three people involved.

Hindsights:

Tereshkova continues to accumulate honors and awards – recently as 'Woman of the Century' by a European political group. She regularly attends cosmonaut launches at Baykonur. She has aged gracefully and well.

Tereshkova and Nikolayev soon divorced but apparently remained on friendly terms (neither remarried); their daughter grew up and became a physician. When Nikolayev died unexpectedly while visiting his home province and the local authorities confiscated his body for use in a tourist attraction, Tereshkova energetically – but unsuccessfully – campaigned to get it shipped back to the Moscow cemetery near the cosmonaut center that Nikolayev had (she said) already made arrangements with.

The other women in the first female cosmonaut team are now known; some of them remained on duty for several years, and even trained for later all-women missions that all were eventually cancelled. A few other women became cosmonauts in subsequent years for additional special women's programs (such as the 'first woman's spacewalk'), but as today there are no Russian women cosmonauts and no plans to select any in the foreseeable future.

Korolyov reportedly had some of his own ideological reasons to get a woman into space early in the program, to fulfill some predictions of the Russian space prophet Tsiolkovskiy, but he came to regret the decision and often loudly proclaimed he'd never get involved in such a program again.

As of 2005, 40 women had flown into space, 32 of them Americans (and 4 are Russians). Six women have made five space flights each; all are Americans. American women died aboard Challenger and Columbia. American women have commanded space shuttle missions (including the first launch after the Columbia catastrophe) and will again.

Tereshkova's father was not killed fighting Germans, it turns out, but (with so many other ill-prepared and poorly equipped Russian soldiers) in the shameful Winter War (1939-1940) against Finland, where the poor performance of the Soviet army convinced Hitler that his planned attack on the USSR would quickly triumph.