

Encyclopedia Astronautica

Vostok 5

Crew: Bykovsky. Joint flight with Vostok 6. Record flight duration. Spacecraft ended up in a lower than planned orbit and quickly decayed - temperatures in the service module reached very high levels and the flight returned early. Backup crew: Volynov, Leonov.

Joint flight with Vostok 6. The Soviet Union launched *Vostok 5*, piloted by Lt. Col. Valery F. Bykovsky. Two days later Lt. Valentina V. Tereshkova, the first spacewoman, followed in *Vostok 6*. On its first orbit, *Vostok 6* came within about five km of *Vostok 5*, the closest distance achieved during the flight, and established radio contact. Both cosmonauts landed safely on June 19. The space spectacular featured television coverage of Bykovsky that was viewed in the West as well as in Russia. Unlike earlier missions, only a black and white film camera was carried. Photometric measurements of the earth's horizon were made.

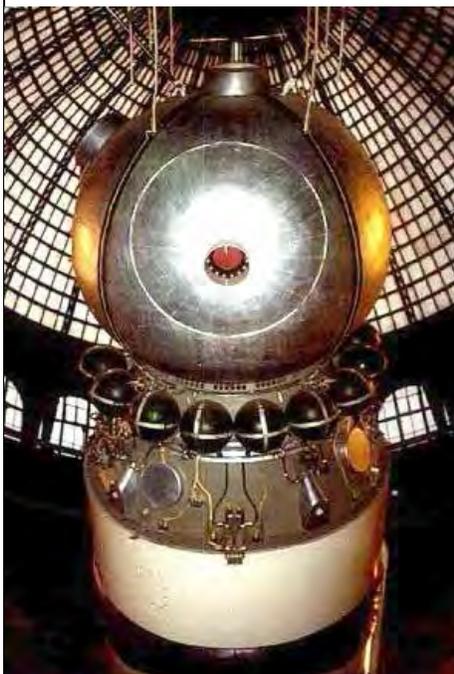
Mission objectives were officially: further study of the effect of various space-flight factors in the human organism; extensive medicobiological experiments under conditions of prolonged flight; further elaboration and improvement of spaceship systems.

Vostok 5 was originally planned to go for a record eight days. The launch was delayed repeatedly due to high solar activity and technical problems. Finally the spacecraft ended up in a lower than planned orbit. Combined with increased atmospheric activity due to solar levels, Vostok 5 quickly decayed and temperatures in the service module reached very high levels.

Bykovsky also experienced an unspecified problem with his waste management system (a spill?) which made conditions in the cabin 'very uncomfortable'. He was finally ordered to return after only five days in space. To top it all off, once again the Vostok service module failed to separate cleanly from the reentry sphere. Wild gyrations ensued until the heat of reentry burned through the non-separating restraining strap. Recovered June 19, 1963 11:06 GMT. Landed 53:24 N 67:37 E.

Summary of Bykovskiy's Post-Flight Debriefing

Launch took place at 14:59, but the spacecraft clock read 15:00. The engine noise of the launch vehicle was weak. I didn't notice cutoff of the first stage or feel the ignition of the third stage. When the spacecraft separated from the third stage there were a lot of frost particles. I tried to orient the spacecraft to see



Vostok Moscow 1981
Credit: © Mark Wade



Vostok 5
Credit: - www.spacefacts.de



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the third stage, but there were a lot of floating particles against the background of the earth. After ten minutes of wasteful attempts to orient the capsule to see the stage the air pressure in my orientation tanks was down to 10 atmospheres. The spacecraft moved very slowly under manual orientation. I needed to conserve 5 atmospheres of orientation tank pressure for retrofire. To turn the spacecraft perpendicular to the direction of motion, or towards a star or moon to check the orientation took eight minutes.

Bykovsky
Bykovsky aboard Vostok 5.
Credit: RKK Energia

I couldn't see Volgograd, it was clouded over. I did finally see the third stage of my booster but couldn't see Vostok 6 despite many attempts. I could make out islands easily, and recognised Leningrad, the Nile, and Cairo. At sea I could see the wakes of ships and large barges. In Norway the fjords and mountain summits were easily made out.

At night, through the Vzor, I could see lightning flashes and cities over South America. I saw aircraft contrails over France. didn't exercise on the first day to avoid motion sickness. The binocular device for preventing motion sickness didn't have any effect. I looked at the earth through the lens of the film camera. There was no reading on the dosimeter. I tried to see the solar corona using various filters, but saw nothing. Attempts to see the polar lights or airglow were also unsuccessful.

In the first floating session I did not completely release myself from the seat at first. Then I floated through the air a bit; it was very pleasant. However the fan to the suit air supply would cut off whenever I released myself from the seat - a real problem. In the second floating session I looked out through the porthole. I could see the ship's antenna and a piece of dangling cable. Floating pleased me a great deal.

All the instruments in the cabin were easy to use and accurate except for the clock. I checked the position of the globus instrument once per orbit and it remained accurate. The suit ventilation was adequate; I turned the fan off at night. The temperature in the cabin ranged from 30 deg C to 15 deg C on the first day, and was down to 10 deg C by third day. When I was told to return to earth on the 82nd orbit, I received conflicting messages via the telegraph. Finally Gagarin confirmed that I should return that day.

The solar orientation for retrofire worked correctly and the TDU braking engine fired for 39 seconds. Immediately after shut down of the engine the capsule separated from the service module. There were no big G forces during reentry. There was a powerful explosion when the cabin hatch blew off, and I was ejected from the capsule in my seat two seconds later. I landed between two trees in a steppe-like region. I was first approached by a man on a horse, then an auto drove up. The local people helped me out of my suit. Soon over a hundred spectators had gathered. Then An-2 and Il-14 search planes flew overhead. I couldn't reach them on the radio. I was driven in a Volga automobile to the spacecraft, which had landed 1.5 to 2.0 km away from me.

AKA: Yastreb (Hawk).
Location: Tsiolokovskiy Museum, Kaluga, Russia.
First Launch: 1963.06.14.
Last Launch: 1963.06.19.
Duration: 4.96 days.

[More... - Chronology...](#)

Associated People

- **Leonov Leonov, Aleksei Arkhipovich** (1934-) Russian pilot cosmonaut. First person to walk in space. Flew on Voskhod 2, Soyuz 19 (ASTP). Cancelled missions included command of first Soviet circumlunar flight in 1969 and first military space station mission in 1973. [More...](#)
- **Bykovsky Bykovsky, Valeri Fyodorovich** (1934-) Russian pilot cosmonaut. Flew on Vostok 5, Soyuz 22, Salyut 6 EP-4. [More...](#)
- **Volynov Volynov, Boris Valentinovich** (1934-) Jewish-Russian pilot cosmonaut. Flew on Soyuz 5, Soyuz 21. [More...](#)

Associated Countries

- **USSR** USSR [More...](#)

Associated Spacecraft

- **Vostok** Russian manned spacecraft. 13 launches, 1960.05.15 (Korabl-Sputnik 1) to 1963.06.16 (Vostok 6). First manned spacecraft. Derivatives were still in use in the 21st Century for military surveillance, earth resources, mapping, and biological missions. [More...](#)

See also

- **Manned spaceflight** Category of spacecraft. [More...](#)

Mir - UR-700M - N204/MMH - Mir-2
- von Braun - Delta IV Heavy - Resnik -
Man-high - Mars 5NM - Taming the
Fire - X-15A - Almaz OPS - Jules Verne
Moon Gun - Plesetsk - Treaty - SALT 1
- J-2 - CZ - Discovery - CXV - Barbarian
MM - Lucid - L1 Launch Windows -
Ares - Skylon - Apollo Lunar Landing -
Ariane 5 - German Diaspora -
A9/A10/A11/A12 - Titan 2 - MiG 105-
11 - Tsien - Shuttle MMU - Yang Liwei
- Salyut 1 - Voskhod 3 - A7L - The
Space Explorers - Moon Race! -
German Civilian Rocketry - Kamanin
Diaries - Apollo 16 - Soyuz TM - V-2
VTOHL - Enterprise - Luna - Minotaur
- Paris Gun - Raketenflugplatz - Tu-
2000 - H-2 HTOHL - Tian Jiao 1 - DC-X
- Molniya-1 - Cooper - Project Orion:
Its Life, Death, and Possible Rebirth -
Ley - Vostok 6 - CEV - Grissom -
MOOSE - DSE-Alpha - STS-1 -
Mercury - Black Mesa - Jiuquan -
Project 921-2 - Shenzhou-5 - Quick
Facts - LK-3 - Mars 5M - MK-700 - CZ-
NGLV - Ride - Key Meetings in Soviet
Spaceflight - S-400 - NK-33 - Gemini
Lunar Surface Rescue Spacecraft - X-
30 - BOR-4 - X-38 - TMK-1 - DLB
Lunar Base - Chang Cheng 1 - R-7 -
Pegasus - PSLV - Orion - Salyut 7 -
Soyuz - Kummarsdorf - The Year in
Space - 2005 - Uragan Space
Interceptor - Lunar L3 - Chertok's
Memoirs - Apollo Spacecraft Systems
Development Diaries - Von Braun
Mars Expedition - 1952 - Mars Direct -
Gemini 4 - Gemini 3 - Skylab's
Untimely Fate - Priroda - Lunar
Orbiters - Jupiter - Black Brant -
Winged - Navaho - Saturn IB - Tsiklon -
Voskhod 2 - RD-170 - Rescue - Apollo
LRV - Leonov - Manned Circumlunar -
Space Station 1984 - Gemini 7 - VLS -
Lunokhod - A9/A10/A11 - Insat - Aries
- Gemini 6 - RD-0120 - Tu-2000 - R-
16 - Mercury MR-3 - IMIS 1968 -
Double Base Solid Propellants - Apollo
19 - Man-In-Space-Soonest - RS-68 -
Boris Chimp 504 - Nerva - X-43 - Von
Braun Mars Expedition - 1969 - Burya
- Mercury Space Suit - R-1 - Voskhod 1
- Gemini 9 - Lunar Flyers - RD-0410 -
R-2 - MAKS - Von Braun Station -
Collins - Gemini 5 - Apollo LM Truck -
Vanguard - Apollo D-2 - Zenit -
Chawla - R-5 - Space Cruiser - R-11 -
Winkler - Space Station - Spiral OS -
Winged Gemini - Chang-Diaz - Young -
Lovell - Meteosat - Luch - GSLV - R-
36M - Shuttle C - Goddard - Swigert -
Rombus - Cost, Price, and the Whole
Darn Thing - Voyager - Bomarc -
Glonass - Nike Hercules - Gemini
Lunar Lander - Orion OLV - Gemini 12
- Echo - Soviet Mars Propulsion -
Nuclear Thermal - Terrier - Nebel -
Rockoon - European Space Stations -
Titov - Shuttle EMU - ESRO - Pioneer
10-11 - A4b - Orlan - Aerobee -
Chinese Manned Space Program:
Behind Closed Doors - Saturn V -
Apollo 204 - Countdown to the
Launch of Shenzhou-5 - White -
Gemini Agena Target Vehicle - RL-10 -
UR-100N - Soyuz 5 - Mercury MA-9 -
H2O2/Kerosene - Belokonyov - Luna
Ye-8 - Mattingly - Surveyor - Nowak -
Sullivan - V-2 - UR-100 - Gemini 11 -
Sputnik 3 - Topol - HOTOL - Gemini
LOR - Apollo ALSEP - Chinese Manned
Spacecraft - Zarya - McAuliffe - Nitric
acid/UDMH - LK-1 - Salyut 6 - A3 -
Progress - Anders - Kosmos 3 - Apollo

Associated Manufacturers and Agencies

- **Korolev** Russian manufacturer of rockets, spacecraft, and rocket engines. Korolev Design Bureau, Kaliningrad, Russia. [More...](#)

Associated Programs

- **Vostok** World's first manned spacecraft, it was later developed into the Voskhod, and numerous versions of Zenit recoverable reconnaissance, materials, and biological research satellites which remained in service into the 21st Century. [More...](#)

Associated Launch Sites

- **Baikonur** Russia's largest cosmodrome, the only one used for manned launches and with facilities for the larger Proton, N1, and Energia launch vehicles. The spaceport ended up on foreign soil after the break-up of Soviet Union. The official designations NIIP-5 and GIK-5 are used in official Soviet histories. It was also universally referred to as Tyuratam by both Soviet military staff and engineers, and the US intelligence agencies. Since the dissolution of the Soviet Union the Russian Federation has insisted on continued use of the old Soviet 'public' name of Baikonur. In its Kazakh (Kazak) version this is rendered Baykonur. [More...](#)

Vostok 5 Chronology

1962 August 8 - .

- **Additional Vostok missions; launch preparations.** - . *Nation: USSR. Related Persons: Rudenko; Nikolayev; Popovich; Korolev; Gagarin; Titov. Program: Vostok; Soyuz. Flight: Vostok 3; Vostok 4; Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9. Spacecraft: Vostok; Soyuz A; Soyuz B; Soyuz V.* Kamanin discusses with Rudenko the need for construction and flight of ten additional Vostok spacecraft. Korolev still plans to have the first Soyuz spacecraft completed and flying by May 1963, but Kamanin finds this completely unrealistic. The satellite is still only on paper; he doesn't believe it will fly until 1964. If the Vostoks are not built, Kamanin believes the Americans will surpass the Russians in manned spaceflight in 1963-1964. From 13:00 to 14:00 Nikolayev spends an hour in his spacesuit in the ejection seat. Kamanin finds many mistakes in the design of the ejection seat. There is no room for error in disconnect of the ECS, in release of the seat, and so on. At 17:00 the State Commission holds a rally to fete Gagarin and Titov in the square in front of headquarters. Kamanin finds the event very warm but poorly organised. At 19:00 Smirnov chairs the meeting of the State Commission in the conference hall of the MIK. Korolev declares the spacecraft and launch vehicle ready; Kamanin declares the cosmonauts ready. Nikolayev is formally named the commanding officer of Vostok 3, and Popovich of Vostok 4. Rudenko gets Popovich's name wrong - his second serious mistake. He had earlier called the meeting for the wrong time.

1962 August 22 - .

- **Future Vostok flight plans discussed** - . *Nation: USSR. Related Persons: Smirnov; Malinovskiy; Korolev; Keldysh. Program: Vostok. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10; Vostok 11; Vostok 12.* At Baikonur for the launch of a Venera probe, the Soviet space leadership discussed future plans. The female cosmonaut training group was there for their first rocket launch. The next Vostok would carry the first woman into space; Ponomaryova, Solovyova, and Tereshkova were the leading candidates. Flight plans were discussed at a meeting in the evening between Kamanin and Leonid Smirnov. It would be possible to make the flight by the end of 1962, but March-April 1963 was more likely, depending on the final report on the Vostok 3/4 flights. The work force would be fully occupied in August-October in launching probes to Venus and Mars, also probably delaying any Vostok flight until the following spring. The next flight would probably be part of a group flight of two or three spacecraft, piloted by both men and women. The female flights would be limited to three days, while the male flights would last for 7 to 8 days. *Additional Details: [here...](#)*

1962 August 24 - .

- **Baikonur conditions** - . *Nation: USSR. Program: Vostok. Flight: Vostok 5. Spacecraft: Vostok.* Kamanin is at Tyuratam for the impending Venera launch, together with some of the cosmonauts. He notes that officers at Tyuratam have to live in hostels, without their families. Some have been there from three to five years, separated from their wives and children. Those who leave to see their families are court-martialled for desertion. At a morning briefing a new 'forced' method of manually orienting the Vostok is discussed. This will allow the spacecraft to turn 360 degrees in 12 minutes. The conservative method using residual angular velocities takes two hours. In the evening the State Commission for the Venera launch meets. This is the first one ever not attended by Korolev - after the meeting in the Kremlin, he became very ill, and is in the hospital. It will be two to three weeks before he can return to work.

Direct 2-Man - Black Powder Solid Propellants - Woomera - The Foundations of the Space Age - Soyuz A - H2O2 - Ariane - Whitson - China - USAF - NASA - Korolev - Baikonur LC1 - Rocketdyne - France - Soyuz 11A511U - Spacelab - Von Braun - Dual Keel Space Station - 1985 - USSR - Lunar L1 - Buran - Power Tower Space Station - 1984 - Flight Telerobotic Servicer - Japan - STS-51-L - Wallops Island - Soviet Manned Lunar Projects - MOM - US-A - Space Station Fred - Voskhod - Kosmos 11K65M - ALSS Lunar Base - HS 601 - HS 376 - F-1A - ESA ACRV - Tiangong - Chinese Space Station - X-Prize - Phantom Cosmonaut - Project Horizon - Female - CZ - Chinese Cargo Spaceship -

1962 August 27 - .

- **Female Vostok flights delayed to 1963** - . *Nation: USSR. Program: Vostok. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10; Vostok 11; Vostok 12. Spacecraft: Sokol SK-1.* The prospects did not look good for authorisation of production of ten further Vostok spacecraft. In a heated discussion between Rudenko, Ivanovskiy, and Grechko, it was argued that production of further Vostoks would delay flight of the first Soyuz spacecraft by a year. On the other hand this would mean no Soviet manned flights in 1963-1964. Furthermore Ivanovskiy reported that production of the female version of the Vostok space suit could not be completed until the end of 1962. Therefore this meant that the flight of two female cosmonauts in the final two available Vostok spacecraft would be delayed until March-April 1963 - the very end of the storage life of the spacecraft.
-

1962 September 13 - .

- **General Staff tries to prevent further Soviet manned spaceflights** - . *Nation: USSR. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10; Vostok 11; Vostok 12.* At a meeting of the General Staff on space plans, it was reported that the Ministry of Defence supported completion of two additional Vostok spacecraft to allow four Vostok flights in 1963. But Malinovskiy was adamant: the Vostok fulfilled no military objectives, would not be accepted for military use, and he would recommend to the Military Industrial Commission that the additional flights be rejected. Kamanin noted that history was repeating itself - fifty years earlier Tsarist generals had rejected the acquisition of aircraft by the Imperial Russian Army.
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1962 November 12 - .

- **Plans for Vostok female cosmonaut flight discussed.** - . *Nation: USSR. Program: Vostok. Flight: Vostok 5; Vostok 6; Vostok 6A.* A meeting was held to discuss alternatives for the next two Vostok flights. Alternatives were simultaneous flight of two capsules, each with a female cosmonaut; or one female flight and a male 5 to 7 day flight. The flight would occur no earlier than April 1963.
-

1962 November 19 - .

- **Female cosmonaut crew selection.** - . *Nation: USSR. Related Persons: Tereshkova; Ponomaryova. Program: Vostok. Flight: Vostok 5; Vostok 6; Vostok 6A. Summary:* The members of the female cosmonaut group were given academic tests and interviewed to choose the first woman in space.. *Additional Details: [here](#)...*
-

1962 November 29 - .

- **Final tests for female cosmonauts.** - . *Nation: USSR. Program: Vostok. Flight: Vostok 5; Vostok 6; Vostok 6A.* Academic examinations were completed of the female cosmonaut corps. Kuznetsova had missed too much training and was excluded from even taking the test. Of the four women remaining, only Tereshkova did not receive the highest marks. This was attributed to her being too nervous and excited during the examination. All were given the rank of Junior Lieutenant in the VVS Soviet Air Force. Kamanin considered Tereshkova as the leading candidate for the first flight, with Solovyova as her back-up. In personality they were equivalent to Gagarin/Nikolayev - indeed, Tereshkova was considered 'Gagarin in a skirt'. Ponomaryova and Yerkina were equal candidates for the second female Vostok flight. The group would go to a resort in the Urals from 30 November to 10 January. The final decision as to which one would fly would only be made 3 or 4 days before the flight.
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1963 January 7 - .

- **Seven Vostok flights planned in 1963** - . *Nation: USSR. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10. Summary:* Agreement was finally reached among space management for the production of five additional Vostok spacecraft during 1963. Two would be used in solo flights and five in group flights..
-

1963 January 9 - .

- **Agreement reached on future Vostok flights** - . *Nation: USSR. Related Persons: Malinovskiy; Keldysh; Smirnov; Dementiev. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10.* After eight months of debate, a Vostok project plan was finally agreed. There would be a single female cosmonaut flight in March-April 1963. This would be followed by 4 to 5 additional Vostok flights in 1963 and 2 to 3 flights in 1964. This plan was approved by Malinovskiy, Keldysh, Smirnov, and Dementiev and forwarded to the Communist Party Central Committee. However Rudenko and others were still opposed.
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1963 January 11 - .

Korolev lays out detailed plan for future Vostok flights - . *Nation: USSR. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10.* Korolev and Kamanin meet to lay out Vostok flight plan. There were three variants possible for the March flights: 1) A single female flight of 2 to 3 days; 2) Two female flights launched one day apart, but landing at the same time; 3) An 'absurd' version: launch of a female cosmonaut for a three day flight, followed two days after her landing by a male cosmonaut on a 5 to 7 day flight. The planners selected the two female flight variant.

1963 January 31 - .

- **Smirnov opposed to dual female Vostok flight.** - . *Nation: USSR. Related Persons: Smirnov; Titov. Program: Vostok. Flight: Vostok 5; Vostok 6; Vostok 6A. Spacecraft: Vostok.* Smirnov only wants to fly two, not four Vostoks this year. One male, and one female cosmonaut would be launched in a group flight. Correct approvals cannot be obtained in time for manufacture of four Vostoks until August of this year. Later Kamanin has another scene with Titov. The cosmonaut was drunk on a factory visit, and defied the militia when confronted.

1963 February 1 - .

- **35 Soviet Cosmonauts in six groups in training** - . *Nation: USSR. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10.* These were:
 - Group 1 - Four cosmonauts (Solovyova, Ponomareva, Tereshkova, Yerkina) in final training for two simultaneous female flights in March 1963
 - Group 2: Three male cosmonauts (Komarov, Bykovsky, Volynov) in training for two or three individual flights of over five days duration in the second half of 1963
 - Group 3: Four flown cosmonauts (Gagarin, Titov, Nikolayev, Popovich) in academic training but also very occupied in public relations tasks
 - Group 4: Six cosmonauts from the first group - not trained for Vostok and available for Vostok or Soyuz flights in 1964 and later (Nelyubov, Shonin, Khrunov, Zikin, Gorbuto, Filyatev)
 - Group 5: Seven pilot-cosmonauts, just selected and starting training
 - Group 6: Eight engineer-cosmonauts, just started training.

1963 February 16 - .

- **Plethora of projects** - . *Nation: USSR. Related Persons: Vershinin. Program: Vostok; Soyuz. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7. Spacecraft: Vostok; Soyuz A; Raketoplan. Summary:* Vershinin says the Soviet Union can't work on the Vostok, Soyuz, and Raketoplan manned spacecraft all at the same time. But he still wants to fly four Vostoks by the end of the year..

1963 February 18 - .

- **Soviet Ministers' decree on use of Vostok** - . *Nation: USSR. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10.* The Soviet Ministers finally issued decree 24. Four additional spacecraft are to be completed in the first half of 1963. Together with the two existing spacecraft, these will be used for two female flights, three male flights of up to ten days duration, and one 30-day biosat flight.

1963 March 8 - .

- **Ustinov challenges Vostok plans** - . *Nation: USSR. Related Persons: Ustinov. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10.* Ustinov, Smirnov, and other industry leaders challenge the plan for dual female flights. They would send only one woman aloft in Vostok s/n 007. Vostok s/n 008 would be held as a reserve. If Vostok s/n 007 was successful, s/n 008 would be used for a simultaneous manned flight. Training was to be complete by 1 April. The Soviet Air Force was categorically against this sudden revision. There were four women that had completed advanced training and were ready for flight, while there were only three men in training for flights later in the year. It would be impossible to complete the training of the male cosmonauts in a few weeks. However the spacecraft would reach the end of their storage life by May-June 1963 and would have to be used by then.

1963 March 21 - .

- **Vostok programme cut back - second female flight cancelled** - . *Nation: USSR. Related Persons: Kozlov. Flight: Vostok 5; Vostok 6; Vostok 6A; Vostok 7; Vostok 8; Vostok 9; Vostok 10. Spacecraft: Vostok.* Vostok flight plans were drastically curtailed at a meeting of the Presidium of the Communist Party. Korolev presented the plan for 1963 as approved by the Interorganizational Soviet at the beginning of the year. This plan, already in an advanced stage of execution, was rejected utterly by Kozlov and Vershinin. The Ministry of Defence announced its categorical opposition to further Vostok production. It was finally decided that there would be only two flights in 1963 using existing spacecraft. These were scheduled for June and would consist of simultaneous female and male flights. Kamanin was infuriated that although he was ordered by a leadership decree in December 1961 to train five

women for spaceflight, the same leadership was now asking - Who ordered this? What was the purpose? Are we sure they're ready?

1963 April 6 - .

- **The General Staff considers the topic of spaceflight and is opposed to greater VVS participation.** - . *Nation: USSR. Flight: [Vostok 5](#); [Vostok 6](#). Summary:* They are not against the flight of four Vostoks in 1963, though..

1963 April 13 - .

- **At a meeting with the VVS, Korolev outlines his revised plans for the next flights.** - . *Nation: USSR. Related Persons: [Korolev](#). Flight: [Vostok 5](#); [Vostok 6](#). Summary:* He plans a male flight for 8 days, during which a woman would be sent aloft for 2 to 3 days..

1963 April 13 - .

- **Decree issued for four Vostok flights in 1963.** - . *Nation: USSR. Flight: [Vostok 5](#); [Vostok 6](#). Spacecraft: [Vostok](#). Summary:* Decree issued by the Soviet ministers and Central Committee setting out four Vostok flights in 1963. Two are to be launched by 15 June. .

1963 April 19 - .

- **Cosmonaut training for Vostok 5/6.** - . *Nation: USSR. Related Persons: [Bykovsky](#); [Volynov](#); [Leonov](#); [Khrunov](#); [Tereshkova](#). Flight: [Vostok 5](#); [Vostok 6](#). Spacecraft: [Vostok](#).* It is clear that the female cosmonauts are trained and ready for an August flight, and the men ([Bykovskiy](#), [Volynov](#), [Leonov](#), [Khrunov](#)) can complete training by that date. The male cosmonauts object to spending 7 to 8 days in a spacesuit in the ground spacecraft mock-up as required by the flight doctors. They don't want to spend more than 3 to 4 days.

1963 May 4 - .

- **Kamanin informed that a dual spaceflight has been decreed within the next 6 weeks.** - . *Nation: USSR. Related Persons: [Bykovsky](#); [Volynov](#); [Leonov](#); [Khrunov](#); [Tereshkova](#); [Korolev](#); [Titov](#); [Alekseyev](#), [Semyon](#). Flight: [Vostok 5](#); [Vostok 6](#).* Only today is Kamanin informed that a dual flight has been decreed within the next 3 to 6 weeks. The women are ready, but [Bykovskiy](#) and [Volynov](#) need a few parachute jumps and training in the hot mock-up. [Leonov](#) and [Khrunov](#) need additional centrifuge training as well. [Bykovskiy](#) and [Volynov](#) should be ready by 30 May, and [Leonov](#) and [Khrunov](#) by 15 June. Therefore earliest possible launch date is 5 to 15 June. [Alekseyev's](#) bureau is as always the pacing factor. He can adapt one of the female ejection seats for [Bykovskiy](#), but not for [Volynov](#). The space suit for [Leonov](#) will only be completed by 30 May. Kamanin talks to [Korolev](#) about dumping [Alekseyev's](#) bureau in the future. Cosmonaut parachute trainer [Nikitin](#) agrees that [Bykovskiy](#) can complete his parachute qualification at [Fedosiya](#) on 9-10 May. Further bad behaviour by [Titov](#) is reported during a trip to Kiev. He insulted an officer ('I am [Titov](#), who are you?') and then had general's wives intervene on his behalf to get him out of trouble.

1963 May 9 - .

- **Cosmonauts Tour Glushko Factory** - . *Nation: USSR. Related Persons: [Glushko](#); [Korolev](#); [Komarov](#); [Khrunov](#); [Alekseyev](#), [Semyon](#). Flight: [Vostok 5](#). Spacecraft: [Sokol SK-1](#).* Victory Day Holiday in the Soviet Union. The cosmonauts toured [Glushko's](#) engine factory. [Glushko](#) has 11,000 employees at four locations. The resentment between [Glushko](#) and [Korolev](#), going back to their time in the Gulag, is apparent. [Korolev](#) calls during the tour but [Glushko](#) does not return his call. Later [Alekseyev](#) contacts [Kamanin](#) and proposes that [Komarov](#) be the back-up cosmonaut for [Vostok 5](#) rather than [Khrunov](#) - because he hasn't finished the suit yet for [Khrunov](#)!

1963 May 11 - .

- **Vostok 5 / Vostok 6 Planning** - . *Nation: USSR. Related Persons: [Bykovsky](#); [Volynov](#); [Leonov](#); [Khrunov](#); [Tereshkova](#); [Solovyova](#); [Ponomaryova](#); [Yerkina](#); [Keldysh](#); [Rudenko](#); [Korolev](#). Flight: [Vostok 5](#); [Vostok 6](#). Spacecraft: [Vostok](#).* [Korolev](#) reports still problems with components of the electrical system from the [Kharkov](#) factory -- the same problems that existed in 1962. The cosmonauts will go to [Tyuratam](#) on 27/28 May, with launch planned for 3/5 June. [Bykovskiy](#) is named prime for [Vostok 5](#), with [Volynov](#) his backup. [Tereshkova](#) is named prime for [Vostok 6](#), with [Solovyova](#) and [Ponomaryeva](#) both as her backups. This selection is however made despite strong support for [Ponomaryeva](#) as prime by [Keldysh](#) and [Rudenko](#).

1963 May 13 - .

- **Korolev fights excessive VVS staff at Tyuratam.** - . *Nation: USSR. Related Persons: [Korolev](#); [Bykovsky](#); [Alekseyev](#), [Semyon](#); [Cooper](#). Flight: [Vostok 5](#); [Vostok 6](#); [Mercury MA-9](#). Spacecraft: [Sokol SK-1](#).* The VVS

wants to send 55 staff to Tyuratam for the launches, but Korolev wants no more than 25. This is just possible - 11 cosmonauts, 8 engineers, and vital support staff only. Bykovskiy was to start a two day run in the hot mock-up, but it was called off due to defects with his suits - the biosensors were wired to his helmet microphone! The suit seems not even to have been tested before delivery. Alekseyev was supposed to have it ready by 9 May, now it will only be ready for use by 14 May. Gordon Cooper is scheduled for a 34 hour Mercury flight tomorrow....

1963 May 14 - .

- **Tereshkova and Solovyova rated most ready to fly on Vostok 6.** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky; Solovyova; Ponomaryova; Yerkina. Flight: Vostok 6; Vostok 5. Spacecraft: Vostok. Summary:* Tereshkova and Solovyova are most ready to fly and will be sent to Fedosiya for sea training first. Ponomaryova and Yerkina will follow tomorrow. Bykovskiy started his run in the hot mock-up at 10:00 am. .

1963 May 15 - .

- **Cooper's flight scrubbed; Bukovskiy to start in Vostok 5 hot mock-up.** - . *Nation: USSR. Related Persons: Cooper; Bykovsky. Flight: Vostok 5; Mercury MA-9. Spacecraft: Vostok.* Cooper's flight was scrubbed due to a problem with the Bermuda tracking site. Bykovskiy's suit microphone failed on the second day in the hot-mock-up and he as to communicate by telephone or telegraph. The doctor's insistence that each cosmonaut spend the full duration of his planned flight in the hot mock-up is idiotic. The US practice is to simulate the active portions of the flight only. In actuality every day spent in a suit on the earth is as gruelling as three days in space.

1963 May 16 - .

- **Bykovsky's ordeal in Vostok-5 hot mock-up to be ended on third day.** - . *Nation: USSR. Related Persons: Cooper; Bykovsky. Flight: Vostok 5; Mercury MA-9. Spacecraft: Vostok. Summary:* It is decided that extending Bykovskiy's ordeal in the hot mock-up to a third day makes no sense. The IAKM doctors are utterly incompetent. Cooper has landed after a successful flight. The US is now hot on our tail in the space race. .

1963 May 17 - .

- **Problems with Titov again.** - . *Nation: USSR. Related Persons: Bykovsky; Titov; Volynov. Flight: Vostok 5. Spacecraft: Sokol SK-1.* Problems with Titov again. While on a road trip with a journalist, he left a satchel with sensitive and classified papers unattended in his car - documents from Korolev, secret state decrees by the Supreme Soviet, etc. At 12:30 Volynov took Bykovskiy's place in the hot mock-up. Examination of Bykovskiy's suit showed that it had been incorrectly assembled.

1963 May 20 - .

- **Volynov completes three days in the Vostok 5 hot mock-up.** - . *Nation: USSR. Related Persons: Volynov. Flight: Vostok 5. Spacecraft: Vostok.*

1963 May 21 - .

- **The cosmonauts are informed of the selections for the Vostok 5/6 flights.** - . *Nation: USSR. Related Persons: Bykovsky; Volynov; Leonov; Khrunov; Tereshkova; Solovyova; Ponomaryova; Yerkina; Korolev. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok. Summary:* Korolev asks Ponomaryova why she is so sad - 'I am not sad, but serious, as always'..

1963 May 22 - .

- **Vostok 5 ready for launch on 10 June.** - . *Nation: USSR. Flight: Vostok 5. Spacecraft: Vostok. Summary:* It is reported that the spacecraft will be ready for launch on 5 June and the launch vehicle on 10 June. .

1963 May 25 - .

- **VPK meets to approve plans for Vostok 5 and 6 flights.** - . *Nation: USSR. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok. Summary:* It was proposed that Vostok 5 carry a small 1.5 kg optical telescope to allow better visual observations outside of the spacecraft..

1963 May 27 - .

- **Kamanin and the VVS contingent arrive at Tyuratam for the launch campaign.** - . *Nation: USSR. Flight: Vostok 5; Vostok 6.*

1963 May 28 - .

- **Cosmonaut's parachute trainer Nikitin killed in an accident.** - . *Nation: USSR. Related Persons: Korolev; Rudenko. Flight: Vostok 5; Vostok 6.* He tangled in the air with another member of a group jump, Aleksei Novikov. Both were killed. The Vostok 5 and 6 launch vehicles and spacecraft are both in the MIK assembly wall. Work began on them two weeks ago. Nevertheless Korolev is not happy with the results. He wants the tests run over from the start. Round-the-clock work begins from this day. The bad weather and the news of Nikitin's death produce an atmosphere of gloom. Nikitin's funeral is scheduled for 30 May. Therefore the cosmonauts have delayed their departure in order to attend the funeral and will not arrive at Tyuratam until 31 May. Kamanin was very worried about the effect of Nikitin's death on the female cosmonauts' nerves. The final decree set the launch dates as 2/3 June, with landing on 7/8 June. Kamanin gets into a heated argument with Rudenko, who wants to fly all of the cosmonauts to Tyuratam on a single aircraft. He doesn't see what the big deal is -- after all, state ministers fly together all the time.

1963 June 1 - .

- **Cosmonauts and brass arrive at the cosmodrome for the Vostok 5/6 launch.** - . *Nation: USSR. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok.* A meeting is held to discuss emergency recovery of the Vostoks. There is no realistic chance of their survival if they land at sea in the South Atlantic, Pacific, or Antarctic Oceans, however plans must be made. Several ships and three to four Tu-114 aircraft would be required to have any realistic chance of recovery. However these are not available.

1963 June 1 - .

- **Vostok 5/6 Flight Preparations** - . *Nation: USSR. Related Persons: Rudenko; Raushenbakh. Flight: Vostok 5. Spacecraft: Vostok.* Sunday before the launch. Rudenko goes to the Syr Darya for a swim. The cosmonauts play volleyball, then receive instruction from Rauschenbach on manual orientation of the spacecraft for re-entry. Then everyone goes to the beach for swimming and chess. Good river bass are cooked for dinner. In the evening, the film *The Magnificent Seven* is screened. Kamanin finds it violent but involving - the two hours go by in no time.

1963 June 3 - .

- **Vostok 5/6 Flight Preparations** - . *Nation: USSR. Related Persons: Tereshkova; Solovyova; Ponomaryova; Bykovsky; Volynov; Korolev. Flight: Vostok 6; Vostok 5. Spacecraft: Vostok.* At 9 am Tereshkova, Solovyova, and Ponomaryova practice donning and doffing their space suits. Bykovskiy and Volynov prepare their ship's logs. Korolev discusses plans for tests of the cosmonaut's ability to discern objects from space. Colonel Kirillov completes preparation of the spacecraft for flight.

1963 June 4 - .

- **The State Commission for Vostok 5/6 launches meets.** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky. Flight: Vostok 6; Vostok 5. Spacecraft: Vostok.* All is ready, but the wind is predicted to be 15 to 20 m/s on 7 June. The launch vehicle cannot be launched in winds over 15 m/s. Bykovskiy and Tereshkova are confirmed as the crew for 8 and 3 day flight durations. When they return to earth, a new and difficult life as celebrities will begin for them -- they will be known all over the world.

1963 June 5 - .

- **Vostok 5/6 Flight Preparations** - . *Nation: USSR. Related Persons: Bykovsky; Volynov. Flight: Vostok 3; Vostok 4; Vostok 5. Spacecraft: Vostok.* On the last five days it has been 25 deg C during the days and 15 deg C at night. In the evening the classified film on Nikolayev and Popovich's flights is screened. Kamanin regrets that it cannot be made public. What the Soviet state considers secrets - the configuration of the rocket and spacecraft, the identity of the managers and launch teams - are public knowledge in the US program. A VVS Li-2 (DC-3) transport arrives at Tyuratam with three tonnes of fruit. A real treat for the launch teams. The cosmonauts spend their final night in the cottages. These are equipped with good-quality Italian air conditioners that keep the cosmonauts comfortable on their last night on earth.

1963 June 6 - .

- **Launches of Vostok 5 and 6 delayed** - . *Nation: USSR. Related Persons: Titov; Bykovsky. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok.* Launches of Vostok 5 and 6 are delayed due to failure of the command radio line. There were many such failures during preparation of the spacecraft. It will take three to four days to fix. Kamanin inspects the site for the planned cosmonaut quarters on the Syr Darya river. It is located next to Khrushchev's houses (which he has handed over to Chelomei for quartering his people) and the television centre. The building will face east, with a view of the river and a wooded island. Bykovskiy is run through a first 'practice press conference' to teach him the correct responses to questions. The military officers want to minimise press contacts with the cosmonauts in any case. But the kids in the town are mad about the cosmonauts -- the chanted from 6 to 11 pm in the evening outside their quarters, and Kamanin has seen teenage girls stand in the rain for hours for a chance to

see Titov (and he never even came out as promised).

1963 June 9 - .

- **Vostok 5 is rolled out** - . *Nation: USSR. Flight: Vostok 5. Spacecraft: Vostok.* Vostok 5 is rolled out to the pad at 9 am. It is erected and then tested from 11:00 to 13:30. All is well and it is declared ready for launch. At 16:00 the cosmonauts take the traditional pre-launch walk along the Syr Darya. All is filmed for posterity, including the cosmonauts fishing for their dinner.

1963 June 10 - .

- **Vostok 5 scrubbed due to solar flares.** - . *Nation: USSR. Related Persons: Keldysh; Korolev. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok.* The launch of Vostok 5 is set for 11 June. Final training and consultations are under way. Korolev is not happy with the condition of the spacecraft. At 22:30 in the evening the launch is scrubbed when Keldysh calls from Moscow and advises excessive solar flare activity is expected. Keldysh will review the data tomorrow and advise if it really poses a danger to the cosmonauts.

1963 June 11 - .

- **Vostok 5 slipped to 14 June** - . *Nation: USSR. Related Persons: Bykovsky; Tereshkova; Korolev. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok.* The cosmonauts spend the day on the beach. Tereshkova sits a long time with Korolev on the balcony on the second floor of the house on the river. He interviews her thoroughly to make sure she is ready for the flight. The State Commission meets at 17:00. The expected solar flare did not occur, but the Crimean Observatory claims the risk will remain high. The decision is made to defer the launches to 14/15 June.

1963 June 12 - .

- **Vostok 5 preparations** - . *Nation: USSR. Related Persons: Bykovsky. Flight: Vostok 5. Spacecraft: Vostok. Summary:* The next two days are spent waiting - on the beach in the heat, in fishing, and in politics between the brass at the site. .

1963 June 13 - .

- **Vostok 5 a go for 14 June.** - . *Nation: USSR. Related Persons: Bykovsky. Flight: Vostok 5. Spacecraft: Vostok. Summary:* The solar activity has subsided and the launch of Vostok 5 is set for the following day. Kamanin has foreboding about the flight - eight days in space will be tough on both man and machine. .

1963 June 14 - .

- **Vostok 5 Launch** - . *Nation: USSR. Related Persons: Gagarin; Korolev; Tyulin; Kirillov; Pilyugin; Bykovsky; Khrushchev. Flight: Vostok 5. Spacecraft: Vostok.* At 8 am the State Commission meets and approves a five-hour countdown to launch of Vostok 5 at 14:00. The cosmonaut and his backup have slept well and are at medical at 9:00 for the pre-flight physical examination and donning of their space suits. At T minus 2 hours and fifteen minutes they ride the bus to the pad. A few minutes after Bykovskiy is inserted into the capsule, problems with the UHF communications channels are encountered - three of the six channels seem to be inoperable. Gagarin and Odintsov are consulted on how it will be for the cosmonaut to fly with just three channels operable - is it a Go or No-Go? Go! Next a problem develops with the ejection seat. After the hatch is sealed, a technician cannot find one of the covers that should have been removed from the ejection seat mechanism. It is necessary to unbolt the hatch and check - the seat will not eject if the cover has been left in place. At T minus 15 minutes Gagarin, Korolev, Kirillov, and Kamanin go into the bunker adjacent to the rocket.

A new problem arises -- the 'Go' light for the Block-E third stage won't illuminate on the control room console. It can't be determined if it is a failure of the stage or an instrumentation failure. It will take two to five hours to bring up the service tower and check out the stage. But if the rocket is left fuelled that long, regulations say it must be removed from the pad and sent back to the factory for refurbishment. In that case there can be no launch until August. Krylov and the State Commission would rather defer the launch to August. The last possible launch time is 17:00 in order to have correct lighting conditions for retrofire and at emergency landing zones. But Korolev, Tyulin, Kirillov, and Pilyugin have faith in their rocket, decide that the problem must be instrumentation, and recycle the count for a 17:00 launch.

The launch goes ahead perfectly at 17:00 - even all six UHF communications channels function perfectly. On orbit 4 Bykovskiy talks to Khrushchev from orbit and good television images are received from the capsule. Bykovskiy reports he can see the stars but not the solar corona. His orbit is good for eleven days.

1963 June 14 - . 11:58 GMT - . *Launch Site: Baikonur. Launch Complex: Baikonur LC1. LV Family: R-7. Launch Vehicle: Vostok 8K72K.*

- **Vostok 5** - . *Call Sign:* Yastreb (Hawk). *Crew:* [Bykovsky](#). *Backup Crew:* [Volynov](#); [Leonov](#). *Payload:* Vostok 3KA s/n 7. *Mass:* 4,720 kg (10,400 lb). *Nation:* [USSR](#). *Related Persons:* [Bykovsky](#); [Volynov](#); [Leonov](#). *Agency:* [Korolev](#). *Program:* [Vostok](#). *Class:* [Manned](#). *Type:* Manned spacecraft. *Flight:* [Vostok 5](#). *Spacecraft:* [Vostok](#). *Duration:* 4.96 days. *Decay Date:* 1963-06-19 . *USAF Sat Cat:* 591 . *COSPAR:* 1963-020A. *Apogee:* 131 km (81 mi). *Perigee:* 130 km (80 mi). *Inclination:* 64.9000 deg. *Period:* 87.10 min. Joint flight with Vostok 6. The Soviet Union launched *Vostok 5*, piloted by Lt. Col. Valery F. Bykovsky. Two days later Lt. Valentina V. Tereshkova, the first spacewoman, followed in *Vostok 6*. On its first orbit, *Vostok 6* came within about five km of *Vostok 5*, the closest distance achieved during the flight, and established radio contact. Both cosmonauts landed safely on June 19. The space spectacular featured television coverage of Bykovsky that was viewed in the West as well as in Russia. Unlike earlier missions, only a black and white film camera was carried. Photometric measurements of the earth's horizon were made.

Mission objectives were officially: further study of the effect of various space-flight factors in the human organism; extensive medico-biological experiments under conditions of prolonged flight; further elaboration and improvement of spaceship systems.

Vostok 5 was originally planned to go for a record eight days. The launch was delayed repeatedly due to high solar activity and technical problems. Finally the spacecraft ended up in a lower than planned orbit. Combined with increased atmospheric activity due to solar levels, Vostok 5 quickly decayed temperatures in the service module reached very high levels.

Bykovsky also experienced an unspecified problem with his waste management system (a spill?) which made conditions in the cabin 'very uncomfortable'. He was finally ordered to return after only five days in space.

To top it all off, once again the Vostok service module failed to separate cleanly from the reentry sphere. Wild gyrations ensued until the heat of reentry burned through the non-separating restraining strap.

1963 June 16 - .

- **Vostok 5 day 3 / Vostok 6 launch** - . *Nation:* [USSR](#). *Related Persons:* [Gagarin](#); [Bykovsky](#); [Korolev](#); [Tereshkova](#); [Khrushchev](#). *Flight:* [Vostok 5](#); [Vostok 6](#). *Spacecraft:* [Vostok](#). Bykovskiy slept well, his pulse was 54. The ground station could observe him via television - he made no motion while sleeping. On orbit 23 the cosmonaut was to communicate with earth, but no transmissions were received. Gagarin asks him why, and Bykovskiy simply replies that he had nothing to say and had already had a communications session with Zarya-1. But this was not true, they also reported no transmissions. At 07:00 he is asleep again, pulse 48-51. An hour later Korolev calls and discusses the impending launch of Vostok 6, 11 hours later.

At 12:15 Tereshkova is on the pad. Her pulse skyrockets to 140 aboard the elevator to the top of the rocket. 10 to 15 minutes later she is in the capsule and testing radio communications with ground control. There are no problems with the spacecraft or launch vehicle during the countdown - everything goes perfectly, just as it did on 12 April 1961 when Yuri Gagarin became the first man in space. Tereshkova handles the launch and ascent to orbit much better than Popovich or Nikolayev according to her biomedical readings and callouts. Kamanin feels reassured that it was no mistake to select her for the flight.

The launch of the first woman into space creates a newspaper sensation throughout the world. Direct orbit-to-orbit communications between Tereshkova and Bykovskiy are excellent. She talks to Khrushchev and the Soviet leadership soon thereafter. This was truly a great victory for Communism!

1963 June 19 - .

- **Vostok 5 and Vostok 6 return to earth** - . *Nation:* [USSR](#). *Related Persons:* [Tereshkova](#); [Bykovsky](#); [Korolev](#). *Flight:* [Vostok 6](#); [Vostok 5](#). *Spacecraft:* [Vostok](#). In the morning Tereshkova manually oriented the spacecraft for re-entry easily and held the position for 15 minutes. She was very happy with the result. At 9:00 the state commission took their places in the command post. At 9:34:40 the retrofire command was sent to Vostok 6. After a few seconds, telemetry was received indicating that the engine burn was proceeding normally. The nerves of the commission members finally settled down, but Tereshkova did not call out each event as required. No report of successful solar orientation was received, no report of retrofire, and no report of jettison of the service module. Things remained very tense in the command post - no communications were received from the capsule at all. Knowledge that the spacecraft was returning normally were only received via telemetry, including the signal that the parachute opened correctly from above the landing site. Both spacecraft landed two degrees of latitude north of the aim point. It was calculated that this could have occurred by duplicate landing commands having been sent, but such a failure could not be duplicated in post-flight tests of ground equipment.

Many errors occurred in the entire landing sequences, including actions of the VVS recovery forces. The conditions of the cosmonauts were only reported several hours after their landings. Big crowds gathered at both landing sites. Bykovskiy spent the night in Kustan, then left on 20 June aboard an Il-14 for Kuibyshev. Tereshkova spent her first night in Karaganda, then flew in an Il-8 to Kuibyshev. Many congratulatory phone calls were received from the Soviet leadership. Korolev declared he had no longer

had the time to personally direct Vostok flights and wanted to hand the spacecraft over to the military for operational use. He could then concentrate on development of the Soyuz and Lunik spacecraft.

1963 June 19 - .

- **Landing of Vostok 5** - . *Return Crew: [Bykovsky](#). Nation: [USSR](#). Related Persons: [Bykovsky](#). Program: [Vostok](#). Flight: [Vostok 5](#). Summary:* Vostok 5 landed at 11:06 GMT at 53:24 N 67:37 E..

1963 June 20 - .

- **Vostok 5/6 cosmonaut debriefing** - . *Nation: [USSR](#). Related Persons: [Tereshkova](#); [Bykovsky](#); [Korolev](#). Flight: [Vostok 6](#); [Vostok 5](#). Spacecraft: [Vostok](#).* Korolev, Tyulin, and Rudenko left Tyuratam aboard an An-12, followed by 60 others (cosmonauts, officers, engineers) aboard an An-10. General Goreglyad requests that 'extraneous' staff remain in Kuibyshev, while the rest will proceed on to Moscow with Bykovskiy and Tereshkova. The aircraft arrive at 11:30 in Kuibyshev, then go to the debriefing building on the Volga river. There the debriefing of the two cosmonauts began at 13:00. After the debriefings, in the evening, Korolev took the cosmonauts for a trip on the Volga. Kamanin was infuriated - partying would ruin the post-flight medical tracking.

1963 June 21 - .

- **Vostok 5/6 cosmonaut debriefing** - . *Nation: [USSR](#). Related Persons: [Tereshkova](#); [Bykovsky](#). Flight: [Vostok 6](#); [Vostok 5](#). Spacecraft: [Vostok](#).* Tomorrow morning the entire entourage would depart for Moscow. But on this day at the house on the Volga the cosmonauts were subjected to the attentions of seventy doctors, 100 correspondents, and a large additional number of KGB supervisors, military officers, and engineers. Tereshkova looked fresh and her first press conference with sixty correspondents went well - she made no big errors.

1963 June 22 - .

- **Vostok 5/6 cosmonaut welcome in Moscow** - . *Nation: [USSR](#). Related Persons: [Tereshkova](#); [Bykovsky](#); [Khrushchev](#). Flight: [Vostok 6](#); [Vostok 5](#). Spacecraft: [Vostok](#).* The big day for the cosmonauts. Departure for Moscow was scheduled for 10:30, with the meeting with Khrushchev at Vnukovo planned for 15:00. A sensitive issue - who would exit the aircraft first - Tereshkova, the main celebrity, or Bykovskiy, the senior cosmonaut and the first one launched? An enormous motorcade takes the entourage from the house on the Volga to the airport. Tereshkova and Kamanin are in the lead automobile, followed by Bykovskiy in the second, then the correspondents and so far in others, at five minute intervals. Huge crowds all along the route chant 'Valya! Valya! During the flight to Moscow Kamanin goes over Tereshkova's speech with her. When she and Bykovskiy get off the plane and march up to the tribune, a completely new life will begin for them. After the immense reception at the airport, they go with the leadership to a huge rally at Red Square.

1963 June 24 - .

- **Controversy over Tereshkova's performance** - . *Nation: [USSR](#). Related Persons: [Tereshkova](#); [Korolev](#); [Bykovsky](#); [Keldysh](#); [Tyulin](#); [Yazdovskiy](#). Flight: [Vostok 6](#); [Vostok 5](#).* The cosmonauts are prepared by Keldysh, Tyulin, and Korolev for their first big press conference. Yazdovskiy has inserted a paragraph in the official press release about Tereshkova's poor emotional state while in space. He claims she experienced overwhelming emotions, tiredness, and a sharply reduced ability to work and complete all of her assigned tasks. Kamanin takes him aside and asks him not to exaggerate her difficulties during the flight. She only had tasks assigned for the first day. When the flight was extended for a second, and then a third day, there was essentially nothing for her to do. The ground command did nothing to support her during those additional days. She certainly was never tired, never objected, but rather did all she could to complete fully the flight program.

1963 June 29 - .

- **Vostok 5/6 cosmonauts prepared for first international press conference.** - . *Nation: [USSR](#). Related Persons: [Tereshkova](#); [Bykovsky](#); [Keldysh](#); [Serbin](#). Flight: [Vostok 6](#); [Vostok 5](#). Spacecraft: [Vostok](#).* At a meeting of the Central Committee, Tereshkova and Bykovskiy are taken through possible questions and correct replies by Serbin and Keldysh in preparation for their first international press conference. The training extends from 10 in the morning to 17:00 in the afternoon.

1963 July 1 - .

- **Vostok 5/6 international press conference** - . *Nation: [USSR](#). Flight: [Vostok 6](#); [Vostok 5](#). Spacecraft: [Vostok](#).* Big international press conference with the cosmonauts, beginning at 13:00. The session goes 1 hour and 45 minutes and all answers given by the cosmonauts are acceptable. After this conference they disappear from public view for seven days of medical examinations and monitoring.
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1963 July 3 - .

- **Cosmonaut controversies** - . *Nation: USSR. Related Persons: Tereshkova; Nelyubov; Anikeyev; Filatyev. Flight: Vostok 6; Vostok 5.* A fight ensues over the release of the motion picture film of the flight. The Kremlin leadership still does not want to show the 'secret' launch cadres, rocket and spacecraft configurations, etc. There is also conflict with the planned dismissal of cosmonauts Nelyubov, Anikeyev, and Filatyev, with the flown cosmonauts using their connections with the political hierarchy to try and overturn the decisions of their military commanders. Finally, Tereshkova started a campaign to get a posthumous Hero of the Soviet Union medal for cosmonaut parachute trainer Nikitin. This particularly irritated the military command since as far as they were concerned Nikitin died due to his own error and killed another parachutist in the process. In no way was this deserving of a medal, but the award would convey significant financial benefits to his family and Tereshkova fought on. This was indicative of the quick turnaround celebrity brought to the cosmonauts - from obedient junior officers, anxious not to lose a chance for a spaceflight, to aggressive campaigners, willing to take on even members of the General Staff for what they thought was right.

1963 July 7 - .

- **Kamanin presses for specialised cosmonaut training** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky; Rudenko. Flight: Vostok 6; Vostok 5.* In a two hour meeting with Rudenko, Kamanin attempts to convince him of the need for specialised cosmonaut training (qualifying as spacecraft commander, pilot, navigator, engineer, etc.) for future multi-crew spacecraft. Kamanin points out that in five to seven years they will be routinely flying 2 or 3 place spacecraft and need to start differentiating training now in order to be ready in time. However Rudenko remains unconvinced. Meanwhile Bykovskiy and Tereshkova are at the cosmonaut training centre, completing their flight reports. Kamanin faces difficulties in booking a hotel for the entire cosmonaut group in the Crimea in August --- he can't find any place with fifty vacancies, and concludes he'll have to split the group up. Pressure is coming from the Foreign Ministry for Tereshkova to make an early trip to Brazil, but she is already booked for two or three tours of friendly socialist countries beginning on 30 August and any additional trips can only be made after those are completed.

1963 July 12 - .

- **Korolev wants review of Tereshkova's flight performance** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky; Korolev. Flight: Vostok 6; Vostok 5.* Kamanin discusses future cosmonaut book plans with writer Riabchikov. He is interrupted by a call from Korolev. Korolev wants Tereshkova and Bykovskiy in his office the following morning at 10 am sharp and he wants a full explanation for Tereshkova's poor self- samochuviniy on orbits 32 and 42, about her pvote, her poor appetite during the flight, and her failure to complete some assigned tasks. He blames Kamanin for providing her with inadequate training prior to the flight -- which Kamanin finds a joke since he had never received any support in the past from Korolev for his requests for more and better training of the cosmonauts in high-G and zero-G situations. Korolev had also never listened to any of Kamanin's complaints about the need to improve the living conditions for the cosmonaut on the Vostok spacecraft.

1963 July 13 - .

- **Bykovskiy and Tereshkova take their first road trip** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky. Flight: Vostok 6; Vostok 5.* Bykovskiy and Tereshkova take their first road trip, to Yaroslavl. It is clear that Tereshkova is the star and Bykovskiy is in her shadow. Bykovskiy calls Kamanin - he asks that his wife and Tereshkova's brother be allowed to accompany them on their first foreign trip. Kamanin rejects the request.

1963 July 19 - .

- **Cosmonaut tour plans through December 1963.** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky. Flight: Vostok 6; Vostok 5. Summary:* Cosmonaut tour plans are firmed up for September-December 1963.. Tereshkova and Bykovskiy are to be given a gruelling schedule, having to visit Bulgaria, Mongolia, Italy, Switzerland, Norway, Mexico, India, Ghana, and Indonesia. .

1963 September 7 - .

- **Tereshkova and Bykovskiy begin an eight day tour of Bulgaria.** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky. Flight: Vostok 6; Vostok 5.*

1963 November 21 - .

- **Vostok 5/6 cosmonauts' Far East tour** - . *Nation: USSR. Related Persons: Tereshkova; Bykovsky. Flight: Vostok 5; Vostok 6. Spacecraft: Vostok.* The cosmonauts are to depart on a Far East tour on 27 November, but scheduling is difficult because Sukarno calls to change the dates for Indonesia nearly daily. Kamanin develops four variant scenarios. The cosmonauts are to visit Sri Lanka, Burma, and Indonesia.

1963 November 28 - .

- **Bykovsky achieved lunar flight duration** - . *Nation:* [USSR](#). *Related Persons:* [Bykovsky](#); [Tereshkova](#).
Flight: [Vostok 5](#); [Vostok 6](#). *Summary:* According to a review of Bykovsky's flight log, Bykovsky could have successfully completed a circumlunar flight. Tereshkova would have tired on such a flight - she ate poorly and slept too much..

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