



RIA Novosti

Vladimir Vasyutin.



Illness in orbit

by Bart Hendrickx

In November 1985 the Soviet piloted space programme suffered a setback when the crew of the Salyut 7 space station was forced to return to Earth early due to medical problems experienced by 33-year old commander Vladimir Vasyutin. For a long time little information leaked out on the mission. Vasyutin himself, who died in 2002, never spoke openly about the problems he had in orbit. However, in recent years several accounts by cosmonauts and officials involved in the flight have shed more light on the circumstances that led to its premature end.

Long road to space

Vasyutin was selected as a cosmonaut in August 1976 as part of a team of young Air Force pilots who were expected to fly the Soviet Union's Buran space shuttle. Due to delays in the Buran programme, most of them were transferred to the Soyuz/Salyut training groups in the early 1980s.

In December 1981 Vasyutin was teamed up with flight engineer Viktor Savinykh to back up the Soyuz T-7 visiting mission to Salyut 7. Subsequently, the two men began training for a long-duration mission, acting as backups for the Soyuz T-10 crew, which set a new space endurance record by spending almost 237 days aboard Salyut 7 in

1984. They were then assigned to the backup crew for the Soyuz T-12 visiting flight before beginning preparations for their own long-duration mission, officially called EO-4 (Main Expedition 4).

Vasyutin and Savinykh were to be joined by Aleksandr Volkov, another member of the 1976 selection, to fly a seven month mission to Salyut 7, beginning with the launch of Soyuz T-13 on 15 May 1985. Highlights of the mission would be the docking of a 20 ton Transport Supply Ship (TKS-M) modified for various military experiments, several spacewalks to install additional solar panels and an experimental truss outside the station, and a two week visiting flight by an all-female crew aboard the Soyuz T-14 spacecraft, timed to coincide with the October Revolution anniversary on 7 November.

In December the three cosmonauts would be replaced aboard the station by the EO-5 crew of Soyuz T-15, marking the first in-orbit crew swap. EO-5 was the final expedition scheduled for Salyut-7 before the launch of the Mir space station [1].

These plans were thrown into disarray when all contact with the unmanned Salyut 7 was suddenly lost on 11 February 1985.

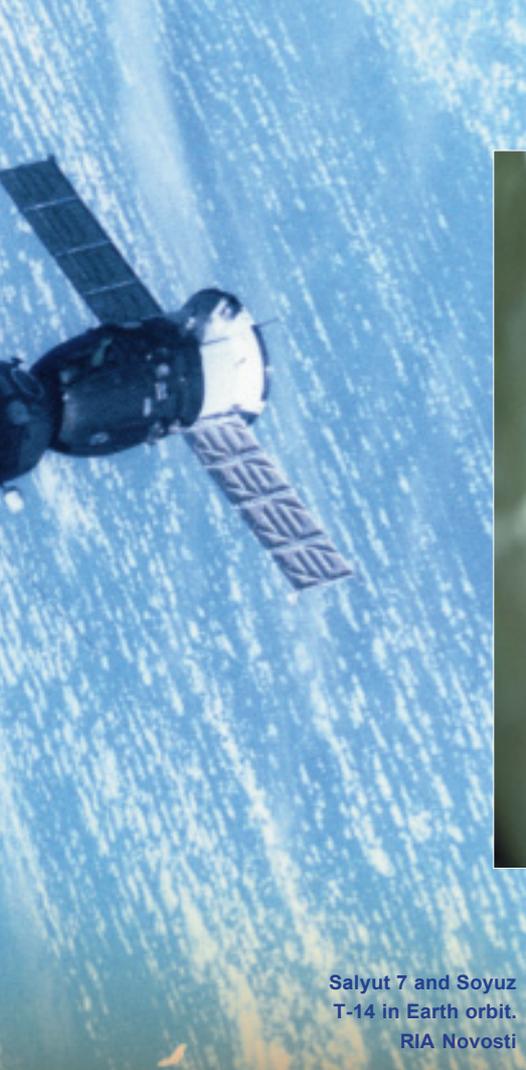
Savinykh was now paired with veteran cosmonaut Vladimir Dzhanibekov to fly a daring rescue mission to the station aboard Soyuz T-13. Launched on 6 June 1985, the cosmonauts pulled off an amazing feat by docking their vehicle with the derelict Salyut 7 and resuscitating the frozen space station.

Soyuz T-14 was eventually launched on 17 September with Vasyutin, Volkov and veteran flight engineer Georgiy Grechko. Vasyutin and Volkov joined Savinykh to complete most of the original objectives of the EO-4 mission, while Dzhanibekov returned to Earth with Grechko aboard Soyuz T-13 on 26 September.

The TKS-M spacecraft was launched as Kosmos-1686 on 27 September and docked with the station on 2 October. The plan was now for the module to undock on 10 January 1986, freeing the front docking port of Salyut 7 for the Soyuz T-15 visiting mission with the all-female crew (Svetlana Savitskaya, Yekaterina Ivanova, Yelena Dobrokvashina).

In order to increase the propaganda effect, this mission was now conveniently timed to coincide with International Women's Day on 8 March, a major holiday in the Soviet Union. Vasyutin, Savinykh and Volkov would return aboard Soyuz T-14 in late

Medical emergency on Soyuz T-14 mission



Salyut 7 and Soyuz
T-14 in Earth orbit.
RIA Novosti

March, with Savinykh setting a 282 day space endurance record.

Contemporary reports

The first sign of trouble came in late October when regular announcements on the crew's activities by the TASS news agency started omitting the standard phrase that the crew 'were in good health and feeling well'.

By mid-November western observers began noticing that the crew were scrambling communications more often than usual. On 21 November TASS suddenly made a terse announcement saying Soyuz T-14 had landed. Only in the final paragraph did TASS state the reason for the termination of the flight: "The cosmonauts' long flight was terminated due to Vladimir Vasyutin's sickness and the need for hospital treatment for him."

During the return to Earth, flight engineer Savinykh had taken over Vasyutin's duties as commander. Radio Moscow World Service reported that Vasyutin had contracted an inflammatory disease, adding that it was 'not very dangerous'. However, medication available on board had turned out to be ineffective and doctors had insisted that Vasyutin should be treated in hospital.

After landing Vasyutin was immediately flown to a hospital in Moscow while Savinykh and Volkov returned to the Baikonur



Georgiy Grechko (from left), Aleksandr Volkov and Vladimir Vasyutin in training. RIA Novosti

cosmodrome for initial post-flight rehabilitation, as was customary in those days.

Little if anything would probably have been revealed about the shortened mission at the time had it not been for the new policy of openness (*glasnost*) initiated by the newly appointed General Secretary Mikhail Gorbachov earlier in the year.

Several weeks after the mission the official Communist Party newspaper *Pravda* published some heavily truncated excerpts from the diary that Savinykh had kept in orbit [2]. While these provided little new insight into what happened during the final weeks of the flight, some additional comments from Savinykh did.

'It all began when we noticed a slight uneasiness in Volodya Vasyutin's behaviour,' he wrote. 'There was a loss of sleep and appetite. We thought it was all to do with his mood — it happens to us all. We tried to buck him up by cracking jokes and giving bits of advice. Then the pain appeared. Volodya wanted to see it through but things became increasingly difficult for him...'

At times we, the doctors and Volodya himself had the impression that his health was improving. I and Sasha [Volkov] were prepared to offer him complete rest and carry out the programme. Still the decision [to return] was correct. Perhaps we all have the right to risk our health, but only our own health. The health of a comrade should never be put at risk.'

In late December 1985 cosmonaut

training chief Vladimir Shatalov told journalists that Vasyutin was healthy and preparing for new flights but a year later it was reported that he was studying at an Air Force Academy. Meanwhile, the Soyuz T-15 all-female mission was cancelled and the final Soyuz T vehicle was used instead by cosmonauts Leonid Kizim and Vladimir Solovyov in 1986 to fly to the newly launched Mir station, then briefly fly over to the nearby orbiting Salyut 7/Kosmos 1686 complex and finally return to Mir. During their stay aboard Salyut 7 in May-June 1986 the two men finished some of the tasks planned for their predecessors, including two spacewalks to install and deploy the experimental truss.

Savinykh's diary

Significant new details on the Soyuz T-14 flight did not emerge until the publication of Savinykh's complete onboard diary in 1999 [3]. The biggest revelation was that Vasyutin had been suffering from some kind of illness in the months leading up to the flight but had managed to keep this secret from the doctors who were to clear him for flight.

The first sign that something was amiss with Vasyutin came in Savinykh's diary entry for 4 October, just two and a half weeks after the Soyuz T-14 launch.

'Yesterday evening, when we were talking about the end of the expedition, I said that we have to ask Mission Control to extend the flight by three days in order to finish the experiments that I didn't have time to do with [Dzhanibekov] because of the problems with the station in the first days of our expedition.'

All of a sudden, the look on Volodya Vasyutin's face changed and he stopped talking.

Afterwards he said: "In aviation there is a principle not to change a planned task". The irritation that this conversation caused caught my attention. Before bedtime he floated over to me and started talking about his health. I tried to calm him down the best I could.'

By mid-October Vasyutin and Volkov had begun preparing for a pair of spacewalks to deploy the experimental truss, which had been delivered by Kosmos 1686. On 16 October Savinykh wrote he was concerned about what he described as Vasyutin's 'old ailment', which Vasyutin confided to him had begun after underwater EVA training in the hydrotank at Star City.

However, they decided not to consult with Mission Control before the spacewalk and press ahead with EVA preparations. Savinykh also noticed signs of depression and irritation: 'The music irritates him. I'm curing him with medicine and advice. The best medicine is work.'

Another two weeks later Vasyutin's condition had deteriorated to the point that the cosmonauts had no choice but to report the situation to Mission Control.

On 28 October Savinykh wrote: 'What a day this has been! It all began yesterday. We had finished our training session for the spacewalk and had done everything as we had been taught. I looked at Vasyutin, he was having a hard time and was very tense. A bundle of nerves. During supper I resolutely said that we had to consult with the ground about his illness, we can't wait any longer. Sasha [Volkov] supported me. He, of course, knew what had been going on before the flight. We had some communication sessions with our families. During the last session I asked the flight director's deputy for medical affairs to come to the mike and switch to a secret communication channel.

'Volodya told A[natoly] D. Yegorov that in the last couple of days he has been suffering pains. First he thought they would pass but they haven't and are affecting his work. I said that if the spacewalk needs to be conducted, I will go with Volkov. Then Vasyutin said what had happened to him. He found it very difficult to speak.

'His state of mind is understandable — he has put everyone in a spot and has ruined the programme. The communication session ended. We didn't go to bed for quite a while. At night we virtually didn't get any sleep — Vasyutin's condition was extremely



Vasyutin, Grechko and Volkov (top to bottom) preparing to board Soyuz T-14.

worrying.'

The following day the crew got advice on Vasyutin's treatment from Oleg Gazenko, the head of the Institute of Medical and Biological Problems (IMBP), and Vladimir Golubchikov, a leading Soviet urologist (the only indication in the diary that the illness was of a urological nature).

They prescribed antibiotics and psychotropic drugs that were available aboard Salyut 7. Valentin Glushko, the head of NPO Energia (the organisation that designed the Soyuz vehicles and Salyut stations), even ordered a psychic to come to Mission Control to try and cure Vasyutin in a less conventional way. But as Savinykh noted: 'He tried to convince Vasyutin that he would take away the pain momentarily but a wonder did not happen. Perhaps because the patient doesn't believe in this.' In the final days of October the pain eased a bit but Vasyutin still had fever. With the ground now aware of the situation, Vasyutin also began acting like a real patient, leaving Savinykh and Volkov to shoulder all the work on the station.

On 2 November, Savinykh wrote that Vasyutin was spending the days lying in his sleeping bag, getting up only to eat. On that particular day his temperature and pulse were acceptable in the morning but after lunch he was again running a fever of 37.4 degrees (Western reports that he had high fever of up to 40 during the last three weeks of the mission are not confirmed in the diary). That same day Vasyutin admitted to the ground that he had privately undergone treatment before the flight, prompting Savinykh to comment: 'I can imagine what's going on right now on the ground.'

Two days later Savinykh described Vasyutin's condition as 'somewhat better', despite continuing fever and a feeling of depression. Doctors were now quite

optimistic and thought he could be cured within 10 days. 'I hope so because he's starting to get on my nerves,' Savinykh complained. 'He doesn't do any work and is talking all the time about what will happen with him after the flight.'

By 10 November Vasyutin's condition had worsened again, but doctors apparently held out hope that his illness could be cured in orbit with no need for an emergency return to Earth.

They prescribed a 30 day treatment during which he would have to take drugs, follow a diet and take complete rest. However, Savinykh noted that Vasyutin was in bad shape and regularly needed comforting ('Once again I had to calm him down by giving him a hug').

He also expressed concern over the fact that his commander hadn't done any physical exercises for two weeks, which in his opinion could have 'grave consequences'. Nevertheless, Savinykh was still hoping to venture outside with Volkov, especially because the equipment needed for the spacewalk was taking up a lot of room aboard the station.

On 15 November, with doctors still optimistic about Vasyutin's treatment, Mission Control gave Savinykh and Volkov the go-ahead to do their spacewalk but Vasyutin's condition wasn't improving. That same day he even had to throw up, which Savinykh attributed to the fact that the high dose of antibiotics might be affecting his liver.

Two days later, as Savinykh and Volkov were gearing up for a dress rehearsal of their EVA, things finally came to a head when Vasyutin again began complaining about his symptoms during one of the morning communication sessions, to which flight director Valeriy Ryumin promptly replied: "That's it! We will probably decide by the evening to bring you back."

Asked how much time they would need to mothball the complex, Savinykh said he expected it would take a week. Later that day the State Commission in charge of the flight, realising that Vasyutin could only be properly treated on the ground, decided to bring back the crew on 21 November, just four days later.

Savinykh was officially appointed crew commander the same day, although he had in fact already performed that role ever since the beginning of Vasyutin's treatment.

After landing, crews would usually spend about a week at Baikonur before returning to Star City but this time Savinykh and Volkov were kept at the cosmodrome for a full



Vasyutin, Grechko, Savinykh, Volkov and Dzhanibekov during the Soyuz T-13/T-14 handover.

month while officials tried to figure out if the crewmembers should be given the traditional post-flight awards.

When Savinykh and Volkov finally returned to Moscow on 20 December, one of the men who greeted them on the tarmac was Vasyutin, who had by then been released from hospital. As Savinykh wrote in the text accompanying the diary: 'I'd rather not recall how I felt about him at that moment.'

Glushko's letter

The only official document thus far released on the Soyuz T-14 medical emergency is a letter that NPO Energiya chief Valentin Glushko sent in late November 1985 to Lev N. Zaikov, who was the Communist Party Central Committee's Secretary for Defence Matters, essentially the head of the space programme in the Soviet days. The letter was recently published in a volume containing declassified correspondence of Glushko [4].

Enclosed with the letter to Zaikov was a seven page medical report written by Oleg Gazenko, as well as complete transcripts of Vasyutin's conversations with Mission Control about his condition — but all these remain classified.

In Glushko's words, the flight had been terminated because Vasyutin was suffering from a dangerous urological disease. He then described what Vasyutin himself had reported from orbit: 'As V.V. Vasyutin himself said repeatedly in conversations with the ground, recorded on tape beginning on 27.10.1985, [he] first had this illness four years ago. During pre-flight training in the hydrotank in early August he experienced the same symptoms again but didn't tell anyone about them.

'He underwent treatment with the

necessary medicines (and therefore did see a doctor). At the launch site the same symptoms began again. During the first week of the flight he had slight pains, which then worsened to the point where he suffered paralyzing pains in the groin. After this Vasyutin had no choice but to admit what had happened.'

Glushko went on to sum up the mission objectives that had not been accomplished (numerous military experiments with Kosmos 1686, several spacewalks, Savinykh's attempt to break the space endurance record), blaming all this on the fact that Vasyutin had covered up his illness.

Among the unfulfilled mission objectives he mentioned were two spacewalks to mount additional solar panels. This shows that Glushko was not as well informed as he should have been because in actual fact this task had been accomplished in a single EVA by Dzhanibekov and Savinykh on 2 August 1985.

The main purpose of the letter was to convince Zaikov that Vasyutin did not deserve the awards traditionally bestowed on cosmonauts after their missions. Glushko referred to a so-called 'Statute of Cosmonauts', approved by a decree of the Central Committee of the Communist Party and the Council of Ministers on 30 April 1981, which clearly stipulated that awards should only be presented to cosmonauts for successful space missions or outstanding accomplishments. For that reason, Glushko stated, Vasyutin was not eligible to receive any awards.

'Commander V.V. Vasyutin, having ruined the important flight programme of the main expedition by covering up his disease not only cannot be awarded, but should also be called to account. He has violated point 2 of the Statute of Cosmonauts of the USSR,

[more particularly the part that states that cosmonauts should] timely and truthfully report to their direct superiors about their state of health.'

Glushko was concerned that giving him top awards would 'discredit the Soviet Union' and make future cosmonauts feel less responsible for carrying out the flight programme.

He was even against awarding titles to Volkov: 'The flight of cosmonaut researcher Volkov was not successful, the programme was not fulfilled, albeit not through his fault, therefore according to the statute he cannot be awarded.'

Savinykh, on the other hand, did fully deserve the Hero of the Soviet Union title (his second), Glushko reasoned, since he had taken part in the heroic rescue of the Salyut 7 space station.

Glushko urged Zaikov to strictly adhere to the statute but in the end his efforts were to no avail. On 20 December 1985 the Presidium of the Supreme Soviet (the Soviet parliament) announced that all three cosmonauts, including Vasyutin, would be given the traditional awards (Hero of the Soviet Union and the Order of Lenin), which they received from Soviet President Andrei Gromyko in a Kremlin ceremony on 30 December.

The only real precedent to go on in making this decision was the Soyuz 21 mission to Salyut 5 in 1976, when health problems experienced by cosmonaut Vitaliy Zholobov had also forced an early return of the crew. Both Zholobov and his commander Boris Volynov had been awarded the Hero title nevertheless but this was before the adoption of the 1981 statute. The only crews that were ever denied the Hero title were those of Soyuz 25 in 1977 and Soyuz T-8 in 1983, both of which were involved in docking failures.

Grechko and Ivanova speak out

Both Georgiy Grechko, the Soyuz T-14 flight engineer who spent one week in orbit with Vasyutin, and Yekaterina Ivanova, one of the women who was scheduled to pay a visit to Vasyutin's crew aboard Soyuz T-15, have spoken candidly about Vasyutin's problems. They criticise him not so much for hiding his pre-flight medical problems but for a lack of diligence and perseverance.

For his brief stay aboard Salyut 7 Grechko had prepared an extensive programme of atmospheric studies which required the other crewmembers to sacrifice much of their off-duty and sleep time.

As he told the Russian space magazine

Novosti kosmonavtiki several years ago, Vasyutin refused to pull his weight: 'Vasyutin didn't help us on board when everyone was moving about like a squirrel in a treadmill. He had managed to conceal his illness during training and was ill in orbit. On the one hand, I understand him, when you want to fly in space at any price. But once you're there, you have to work.'

Grechko made it clear to Vasyutin that this attitude would come back to haunt him after the mission. When Grechko later told a newspaper about Vasyutin having refused to do an EVA and botched the mission, Vasyutin gave him an angry phone call, to which he replied: 'I warned you in orbit.'

Grechko confirms that Glushko was not at all happy with Vasyutin getting the post-flight awards. In his words, Glushko heard the news on the radio when he was on his way to Star City to meet the cosmonauts and resolutely decided to turn back [5].

With the premature return of Soyuz T-14, Yekaterina Ivanova, already grounded once when Salyut 7 broke down in early 1985, saw her final chance to fly in space go up in smoke.

This is how she reflected on the situation many years later:

'Volodya Vasyutin had problems with his health but managed to cover them up. After all, doctors are not clairvoyants. There are lots of ways to hide not very dangerous ailments. During my 12 years in the cosmonaut team I, as well as many other women and men, learned to perfectly master such masking techniques.

'One fundamental rule — if you're asked how you feel, you cheerfully answer fine, even if you can barely stand on your feet... So he succeeded in fooling the doctors and went into orbit. [You'd then expect one to] stick it out and work in spite of everything because enormous amounts of money have been spent and a programme has been worked out that nobody but you can carry out. But Vasyutin didn't cope and because of all of this I was once again grounded [6].'

Volkov's version

Vasyutin's crewmate Aleksandr Volkov has been less harsh on his former commander. Not mentioning any pre-flight medical issues, he claims that Vasyutin had a variety of medical problems caused by weightlessness.

In a 1997 interview for *Spaceflight* he said: "Vasyutin faced a whole 'complex' of medical ailments, which were impossible to cure in space. He had to return to Earth quickly, otherwise his life would have been in



Soyuz T-14 crew shortly after landing.

danger. He did not have any psychological problems — despite the related rumours then.

"I am telling you that responsibly, since we worked together in space for 65 days. He suffered from strong internal pains and from a change of size of his internal organs. His liver became so bloated that it was visible on his body."

Asked whether the problems were caused by the flight itself, Volkov replied: "Every cosmonaut undergoes a detailed medical inspection. Vasyutin went through this inspection and was judged as suitable for a long flight. The specialists believe that his case was one of 'lethal influence of conditions of free fall'. There are conditions in which an absolutely healthy organism can 'break' in free fall." [7]

In another interview, Volkov said that Vasyutin's organism just couldn't cope with weightlessness. "He had just about everything imaginable. All systems of his organism had become unbalanced... He suffered for the full 65 days and [21] hours ... It was tough and we were very worried about him. For him to survive, we had to return to Earth." He also said he had the impression that Vasyutin never made a full recovery after the flight [8].

Shatalov's memoirs

Another version of the Vasyutin saga is given in the memoirs of Vladimir Shatalov, the former cosmonaut who in his capacity as the Air Force Commander-in-Chief's Aide for Space Matters was in charge of cosmonaut training at Star City from 1971 to 1987. [9]

Shatalov refers to the official investigation into Vasyutin's illness, conducted by a special medical commission consisting of the country's leading experts. It was set up shortly after the flight by the Ministers of Health and Defence. According to Shatalov the commission concluded that Vasyutin's disease (an 'acute inflammatory disease') had originated during the flight and was not related to any condition prior to the mission.

Not specifying if this was actually stated

in the commission's report, Shatalov says that Vasyutin's condition was probably caused by the ventilation system in a capsule situated in the forward end of the Kosmos 1686 spacecraft. Facing away from Salyut 7, the capsule was a modified version of descent modules carried by earlier TKS spacecraft and was equipped with a set of optical instruments mainly intended for military observations. Vasyutin and Volkov spent much of their time early in the mission inside the capsule to operate the instruments. A hose carrying fresh, relatively cold air ran from Salyut 7 itself to the cramped confines of the capsule and it was placed such that the cosmonauts had to sit on it while working in the observation post. In all likelihood, the exposure of Vasyutin's internal organs to the cold air had gradually led to the infection, Shatalov says.

Initially Vasyutin was slightly indisposed but eventually he began complaining about severe pains in the lower abdomen and by the end of the mission's second month was unable to work.

Shatalov criticises Glushko for blaming the early termination of the flight on faults made during the cosmonauts' training.

He mentions a letter sent by Glushko to the Air Force Commander-in-Chief Aleksandr Yefimov, which apparently had the same content as the one sent to Central Committee Secretary Zaikov. As Shatalov notes, Glushko had a habit of writing such letters: 'Even before that after every failure Glushko used to send letters to various authorities in which he primarily put the blame for shortcomings on Air Force cosmonauts. The Cosmonaut Training Centre would be accused of deficiencies in the selection and training of cosmonauts. The facts presented in those letters did not always correspond to the truth.'

At the end of the investigation the President of the Academy of Medical Sciences Nikolai Blokhin presented the results to the State Commission in charge of the flight. After that the Air Force sent a letter to Minister of Defence Sergei Sokolov containing the conclusions of the medical commission, which essentially cleared Vasyutin of any blame for the condition he developed in orbit and paved the way for him to receive his post-flight awards.

Putting it all together

Judging by the available accounts, the most likely conclusion is that Vasyutin had some kind of urological condition prior to the flight

that he managed to conceal from doctors and that worsened in orbit to the point that he became incapacitated.

The only stories that contradict this scenario are those of Volkov and Shatalov but it should be noted that both are Air Force colleagues of Vasyutin who may be trying to come to his defence. Moreover, there are problems with both their accounts. Volkov seems to suggest the problems began in orbit and were induced by weightlessness but Savinykh's diary entry for 28 October 1985 implies that Volkov himself had been aware of Vasyutin's pre-flight medical problems and simply decided not to spill the beans at the time.

Savinykh's diary as well as Glushko's letter also indicate Vasyutin was already showing certain symptoms in late September/early October, calling into question Shatalov's story of his condition having been gradually brought on by the ventilation system in the Kosmos 1686 spacecraft, which arrived at the station on 2 October.

Having said that, Shatalov is the only one who claims to refer to the official post-flight investigation, whereas Savinykh's diary is an eyewitness account of the flight itself and Glushko's letter was written barely a week after the crew's return, by which time the official investigation was still underway.

If that investigation did refute a link between Vasyutin's health before and during the flight, there are only two ways to reconcile this with the majority of the accounts.

One is that Vasyutin did have some kind of medical problem before the flight (which Shatalov doesn't deny as such) but that it



On 30 December 1985 state awards were given to Aleksandr Volkov (fourth left), Viktor Savinykh (fifth left), Vladimir Vasyutin (sixth right).

had nothing to do with the disease that he contracted in orbit (although that is not what Vasyutin himself seems to have thought during the flight).

The other is that the Air Force used its influence behind the scenes to clear Vasyutin of all blame. This is certainly what Georgiy Grechko believed happened. In the aforementioned interview for *Novosti kosmonavtiki* he criticises Shatalov for having pulled the necessary strings to get Vasyutin off the hook and make sure he got his post-flight awards and bonuses.

Quite understandably, the rules of medical ethics make it unlikely that the full details of Vasyutin's health problems will ever be made public. The most commonly held belief is that Vasyutin suffered from some kind of prostate infection (prostatitis), something which was reportedly confirmed off the record to American specialists who had inquired about Vasyutin's condition as they were planning their own long-duration flights aboard what was then supposed to

become the Freedom space station. [10]

One consequence of the Soyuz T-14 incident was that medical screening procedures for cosmonauts were made even more stringent than they already were. As a result, at least three would-be cosmonauts — Nikolai Grekov, Nikolai Moskalenko and Yevgeniy Salei — were forced to leave the cosmonaut team in 1986-1987, the latter for the seemingly trivial reason that one kidney was found to be slightly lower than the other.

In the quarter century since the Soyuz T-14 mission, there has been only one other case in which medical problems necessitated the early termination of a flight. In 1987 cosmonaut Aleksandr Laveikin had to return halfway through a marathon mission aboard the Mir space station after developing heart irregularities. However, this had no major impact on the mission because Laveikin was replaced in orbit by a cosmonaut who was originally supposed to spend only a week aboard the station during a visiting mission.

Despite being only 33 years old at the time, Vladimir Vasyutin was quietly dismissed from the Air Force's Star City cosmonaut team on 25 February 1986, barely three months after returning from space.

Whether that was a decision made purely on medical grounds or a disciplinary action, it did not adversely affect his further Air Force career. Vasyutin enrolled in the Gagarin Air Force Academy and after graduation quickly rose through its ranks, becoming deputy head in 1995. He was promoted to major general in 1995 and lieutenant general in 1996. Vasyutin died on 19 July 2002 at the age of just 50 of what was reported to be prostate cancer but there are no indications that this had anything to do with the illness that brought him back to Earth prematurely in November 1985.

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