Thomas Reiter
Sokol Suit
1995

Alexander Gerst
Sokol Suit
2014

RUSSIA

ZVEZDA

SOKOL

SUITS

PATCHES

collectSPACE: **Messages**

Topic posted 06-14-2022 :

Zvezda patch (Mir/Zvezda) on Sokol suits

Can someone help with the use of the blue patch with the red and yellow five point star worn on the centre of the Sokol spacesuit?

Most pictures from the mid to late 90's show this with "Mir" on the patch, which is no surprise, but in some instances cosmonauts are shown with a patch saying "Zvezda."

Once flights to the ISS started the process of wearing patches with Mir or Zvezda seemed to continue with most American or European astronauts wearing a Zvezda patch. Vindogradov, Williams and Pontes (Soyuz TMA-8) all seem to wear Mir patches, but from then on it just about everyone seems to wear a plain patch with no text.

Was the any reason for who wore what and when?

Summer 2022 , From Werner Ackermann , Germany

The following photos were taken from the adjacent book.

The „corrections" under "NOTE" were posted in the "collectSPACE forum"

From CollectSPACE Memeber „hoorenz" , The Netherlands :

„Oh well, for the record, here is my complete list of remarks and corrections, page by page : ….."

For the remarks see „ NOTE : „

1971–1992

The first variant of the arm badge for crews on Salyut orbital stations. First used in 1971 by the crew of the Salyut orbital station. Existed until 1992. Worn on the upper part (i.e. near the shoulder seam) of the left or right sleeves of IVA and training suits worn by the crew of the Soyuz-11 spaceship. One of the last cosmonauts to wear this patch was S.V. Avdeev, the flight engineer of Soyuz TM-15.

not correct ?
?
- left actual flight suits
- right training suits

NOTE :
The 'Vimpel Diamond' is identified by Glushko as a Salyut patch, which I believe is not correct. The funny thing is that he states that is was worn on both the left and right sides of the IVA and training suits. For someone claiming to have devised a method to identify images of crews aboard Soviet spaceships and stations, he should know that this patch was always worn on the left shoulder on actual flight suits and on the right shoulder of training suits...

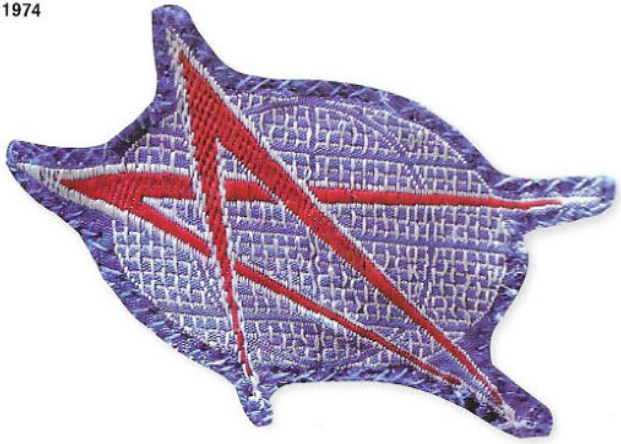
1972–1978

The second variant of the patch for the crews of the Salyut orbital station. First used in 1972 in photos during training of the first crew of the Salyut-2 orbital station. it was used until the middle of 1978 ans was worn on the right upper side of spacesuits and the lower right part of IVA suits. Kindly made available to us by V.E. Nikolaev.

- Logo of the Zvezda factury

NOTE :
The 'Salyut' patch is not a Salyut patch...
but simply the logo of the Zvezda factory.

1974



Patch from the spacesuit of crews of the Soyuz-16 spaceship. Used on spacesuits worn by the principal and back-up crews of this spaceship in 1974. Worn on the upper part of the right sleeve of the grey woollen training and IVA suits. Made available to us by the Memorial Museum of Space Exploration in Moscow.

1977–1987 (1994)

The third variant of the badge worn by crews of the Salyut-6 orbital station. First used in 1977, in photos taken during training of the first crew for Salyut-6. Remained in official use until 1986, and was used on training suits until 1996. Worn on the lower right part of IVA suits.

- Logo of the Zvezda factury
- reproduction 2006

NOTE :
The Zvezda logo shown here is a reproduction produced for Alex Panchenko at the time of Soyuz TMA-9 (it has the exact same nylon background). See also page 104, for the MKC-version, which is from the same manufacturer and was made at the same time.

1979–1985

The fourth variant of the badge of the crews of the Salyut-6 orbital station. Used on IVA suits in 1979–1980 and on training suits and IVA suits until 1985. Was worn at the same time as the third variant of the patch on the upper right side of IVA spacesuits and on the lower right pocket of IVA suits. Is a version of the third variant of this patch

1980–1986

The fifth variant of the badge worn by crews of Salyut orbital stations. First used in 1980, in photos of the crew of the Soyuz T-2 spaceship, before the latter's launch. Was officially in use until 1986 and on training spacesuits until 1990. Worn on the stomach, between the zips on the spacesuit.

1982

The fifth variant of the badge for members of Salyut orbital stations. Introduced in 1982 for crews on the Salyut-7 orbital station. Used only on the IVA suit of S.A. Savitskaya, and was never used again after 1982. Kindly made available to us by S.A. Rozhdestvenskaya, widow of the Soviet pilot and cosmonaut V.I. Rozhdestvensky.

1987 – mid-1990s

The first variant of the patch for the Mir space station. Used on IVA spacesuits only in 1987, by crews of the Soyuz TM-2 and Soyuz TM-3 spaceships, and by the commander and cosmonaut-researcher of the Soyuz TM-4 spaceship. Used on training suits until the middle of the 1990s. Worn on the stomach, between the zips on the spacesuit.

NOTE :
The image of the Zvezda-Mir patch is from my collection.
On our Flickr account where it is taken from, I state that I doubt that it is an original.

1987

The second variant of the patch for the Mir space station. Used in 1987 by the crew of the second principal expedition (Romanenko, Laveykin) and by cosmonaut A.P. Aleksandrov, who replaced A.I. Laveykin in August 1987.

- o.k., but modern copy

NOTE :
Clipped Mir patch is from my collection and I am almost sure it is a modern copy.

1987–2000

The third variant of the patch of the Mir space station. Used in 1987–2000. Worn on the stomach, between the zips of spacesuits, and from 1990 forwards on the chest of training suits.

- at the end of MIR → fourth variant - not shown

NOTE :
Now some compliments. First flight of third variant of Zvezda-Mir patch is rightly identified. Good! At the end of the Mir-proram, there was a fourth variant, which is not described in the book.

1991– currently

zvezda company logo

The first variant of the 'Star' patch. Has been worn by cosmonauts from 1991 forwards and is still in use at the present time, together with other variants of this patch. Worn on the right side of IVA suits and on the stomach, between the zips, on spacesuits.

-red bordered also exised

NOTE :

Zvezda patch not identified here as
Zvezda company logo.
A red bordered variant also existed and was flown
to Mir but is not mentioned here.
Also, some other commercial patches flown on
Soyuz TM-11 (Aleko, Japanese brands) and
TM-13 (Austrian companies), as well as
the later Avikos patches, are not described in the book.

At least some remarks about this development should have been made, because we see some of these patches in the pictures in the book.

2000

The third variant of the 'Star' patch. In use since 2000. Worn on IVA suits and spacesuits.

-Zvezda-MIR variant uesed by Zvezda-technicians

2004

The patch of the International Space Station. As far as I know, this patch was only used once – in the official photo of the principal crew of the Soyuz TMA-5 spaceship, on the spacesuits of Russian cosmonauts S.S. Sharipov and Y.G. Shargin. Worn on training suits.

NOTE:
Shown here is Zvezda-Mir a variant on a blue felt background as worn by Zvezda space suit technicians.

Summer 2022 , From Werner Ackermann , Germany

The following photos were
taken from the book below

Soyuz 19 15 July 1975 5 d 22 h 31 m21
A. Leonov V. Kubasov
Apollo-Soyuz Test Project.
First docking with American spacecraft

NOTE :
Diamond on blue velvet. One of the original ones.
There were copis produced manually by the
Mamalyga-Dobrowolski marriage and sold on eBay.

Soyuz 36 - Soyuz 37 Salyut 6
V. Gorbatko P. Tuân Vietnam
23.07.1980 7d 20h 42m 00s

Soyuz 37 - Soyuz 38 Salyut 6
Y. Romanenko T. Arnaldo Cuba
18.09.1980 7d 20h 43m 24s

Soyuz T-4 - Soyuz 39 Salyut 6
V. Dzhanibekov Z. Gurragcha Mongolia
7d 20h 42m 03s 22.03.1981

Soyuz T-5 Soyuz T-6 - Salyut 7
V. Dzhanibekov A. Ivanchenkov J-L. Chrétien France
7d 21h 50m 53s 24.06.1982

Soyuz TM-7 Soyuz TM-6 - Mir
A. Volkov S. Krikalyov
J-L. Chrétien France
24d 18h 07m 06s 26.11.1988

NOTE :

MIR logo also applies to ZVIEZDA patches.

One of several similar, embroidered on differnt fabrics.

Most often , these typs of patches were embroidered on a shiny fabric from which TZK cold suit was sewn.

Soviet Union - Japan

Soyuz-TM11 Mir

[December 1990]

Russia - United Kingdom

Soyuz-TM12 Mir

[May 1991]

Soviet Union - Austria

Soyuz-TM13 Mir

[October 1991]

Soviet Union - Austria

Soyuz-TM13 Mir

[October 1991]

Russia - France

Soyuz-TM15 Mir

[July / August 1992]

Soyuz-TM17 Soyuz TM-16 Mir
V. Tsibliyev A. Serebrov
J-P. Haigneré France
20d 16h 08m 52s 01.07.1993

Russia - France

Soyuz-TM17 Mir EO14

[July 1993]

Russia - Germany

Soyuz-TM22 EuroMir-95

[September 1995]

Russia - France - Slovakia

Soyuz TM-29 EO-26 Perseus

[February 1999]

Summer 2022 , From Werner Ackermann , Germany

The following photos / text were taken from the :
SPACEPATCHES . NL : http://www.spacepatches.nl/ Patch Index

 Nasa	 Wostok	 ESA
 Mercury	 Woskhod	 Hermes
 Gemini	 Soyuz	 China
 Apollo	 Salyut	 X-15
 Skylab	 Apollo Soyuz	 X-20 Dyna Soar
 Space Shuttle	 Mir	 MOL
 ISS Expeditions	 ISS Soyuz	 Private flight
 Constellation	 Buran	 Personal patches

(1971-1991)

This patch is not commercially available. Stewart Aviation in England did make a replica in the late 1980's, as part of a generic Soviet patch set. These patches were made from pictures sent by Dutch patch collector Luc van den Abeelen. In 2003, Randy Hunt made a replica from the replica. Since detailed pictures of the patch were scarce, both souvenir versions do not accurately depict the diamond shaped outline and the tail of the rocket.

The circular logo with with a yellow sun, a globe with the outline of the Soviet union, a horizontal rocket and the letters CCCP first appeared during the Soyuz-9 mission (1970) on the left shoulder of the new Trenirovochnyi-Nagruzochnogo Kostuma-1 (Training Load Costume; TNK-1) exercise suit. The short-sleeved singlet, with elastic bands at the upper part of the body and docking straps for the KTF-exercise treadmill in the living compartment of the Soyuz-ship, was especially designed for use aboard long-duration missions. It was part of an excercise package called 'Diamond', produced by the company Vimpel. We believe the circular CCCP-logo was originally refering to the entire 'Diamond' package (note the diamond shape outline around the earth) and later became the standard logo sewn to all cosmonaut-related equipment produced by the Vimpel company, like the Zvezda 'Rocket' was sewn to Zvezda-made equipment. We will further refer to this patch as the Vimpel 'Diamond'.

The crew of Soyuz-9 was the first to take part of the 'Diamond'-package, including the TNK-1 suits, into space. The next mission, Soyuz-10, also carried the long-sleeved 'Athlete' TNK-suit, designed to be worn not only for short 45 minute exercise periods, but during the entire workday, just like the Zvezda 'Penguin'-suit in modern days. The 'Athlete' suit proably came in three colors (orange, green and blue). Since the crew of Soyuz-10 did not manage to board Salyut-1, the TNK-1 and TNK 'Athlete' suits were not used on that flight. Vimpel's TNK-1, and TNK-'Athlete' were used by the ill-fated Soyuz-11 crew aboard Salyut-1 in 1971. The crew also carried the TNK 'Penguin' suit, manufactured by Zvezda, for the first time, but did not wear it as often as they should.

The TNK-1 and TNK 'Athlete' were used on all subsequent Soyuz missions that docked to a Salyut station (Soyuz-13, Soyuz-14, Soyuz-17, Soyuz-18B). Onboard pictures sometimes show one of the cosmonauts wearing the 'Athlete' suit, while the other is wearing the 'Penguin' suit. Maybe, the Soviets wanted to test which of the suits was more effective. Following Soyuz-18B, the full TNK 'Athlete' suit was probably discontinued. Zvezda's TNK 'Penguin' had taken over the role of main exercise suit, worn for long periods each day. For the KTF treadmill, use of the TNK-1 short sleeved singlet with straps was continued, though, so the Vimpel 'Diamond' patch was still used aboard, but only during exercise and thus less visible.

During the Mir-program, a new blue circular 'Vimpel' patch was seen on the KTF treadmill equipment. This was preceded by a period of time in which no patch was on the treadmill equipment at all. So somewhere in between the Vimpel 'Diamond' had been discontinued for that use as well. This probably happened in the early ninetees, when the Soviet Union had collapsed. At that time, the letters 'CCCP' did not make sense anymore and in commercialized Russian society, it became normal for a company name like 'Vimpel' to appear on equipment and suits. In 1990, for instance, the name 'Zvezda' was also worn for the first time on the Soyuz TM-11 Sokol suits.

Most visible use of the Vimpel 'Diamond' patch during the late seventies, eighties and early ninetees was that on the colorful 'Trenirovochnyi Kostum' or TK-2 training suits, also produced by Vimpel and seen first in training for the 1975 Apollo Soyuz Test Project (ASTP). The Vimpel 'Diamond' was worn on the right shoulder of these earth-bound training suits. It was still in use on these suits in the 1980's and early 1990's, during the Mir program. The newer 'Vimpel' logo showing the company's name also replaced the Vimpel 'Diamond' on the TK-suits around 1991.

(1973-1978)

The patch was made by the Zvezda factory and is not commercially available.
We do not have it in our collection and no souvenir versions have been produced. The picture of the patch from Lasarev's jumpsuit was taken from an internet auction.

Following the Soyuz-11 disaster in June 1971, Soyuz-cosmonauts started wearing so called "Sokol" pressure suits. Standard item on the flightsuits was a blue, square piece of woven canvas, showing the logo of the manufacturer: Zvezda. Sometimes, it also included the yellow lettering 'Salyut'. It was attached to the right upper chest. The first crew to wear the suits were Vasili Lazarev and Oleg Makarov, who were launched aboard Soyuz-12 on September 9, 1973.

The woven Zvezda-logo was worn on every flight-Sokol since Soyuz-12 (except Soyuz-19, the high-profile Apollo-Soyuz mission which had its own patch layout) until Soyuz-27 (January 1978), after which the Interkosmos flights (also with their own patch layouts) began. Interesting note: the final cosmonaut to have the logo on his flight-Sokol was Oleg Makarov again. His Soyuz-27 crewmate Vladimir Dzjanibekov (probably wearing a newer suit) already had a blank spot on his Sokol.
The logo was not always present on the training Sokols, even though these suits were from Zvezda as well. Although the logo disappeared from the flight Sokols beginning with Soyuz-27, the crews of Soyuz-30, 31 and 32 still had it on their training suits in 1978.
The patch was also worn on some intravehicular clothing during the early Soyuz / Salyut program. It was also worn on the left shoulder of the blue Penguin suits. The Penguin was first flown on Soyuz-10, but first worn by the Soyuz-11 (Salyut-1, June 1971) crew. We do not know if these Penguins already had the blue

Zvezda logo. Most pictures show the Soyuz-11 crew in their TNK 'Athlete' suits, which they were permitted to wear round the clock. Since the Zvezda 'Rocket' was still in use on the intravehiculr suits, this might be an indication that the blue early Zvezda was not in use yet. The Soyuz-12 crew did not carry Penguins; the Soyuz-13 Penguins did have the early Zvezda patch, as photographes confirm. The Soyuz-29 Penguins (Summer 1978) were the last. An embroidered version of the Zvezda patch (which later evolved into numerous follow-on Salyut, Mir and ISS versions) became available for intravehicular suits as early as 1975 (the high profile Soyuz-22 Earth Observation mission) and was also present on the first Salyut-6 Orlan (spacewalk) suits in 1977.
The embroidered patch became standard issue on the blue Penguin suits halfway the Soyuz-29 stay aboard Salyut-6. Cosmonauts Vladimir Kovalenok and Alexander Ivanchenko were still wearing their old Penguins when the Soyuz-30 crew visited in June/July 1978, but had new Penguin suits with embroidered patches when Soyuz-31 arrived in August 1978. Their new suits were probably brought up by the Progress-2 (which docked July 9, 1978) or Progress-3 supply ship (which docked August 9, 1978). Thus, with Soyuz-32 (February 1979), all use of the early Zvezda patch in space had been discontinued.

NOTE :

The Soyuz T-6 crew of flight engineer Alexandr Ivanchenkov, commander Vladimir Dzhanibekov and Jean-Loup Chretien.
SOYUZ – T 6 , June 24 - July 2, 1982

The ISRO seal, Salyut patch, mission patch and Indian flag on Sharma's suit in a preflight photo.
SOYUZ – T 11 , April 3 - 11, 1984

Soyuz T-15 / EO-1 , March 13-July 16, 1986

The first mission to Mir did not have its own patch.

The cosmonauts were launched with the typical Salyut configuration on their Sokol suits: a wedge-shaped Salyut patch on their chest, a Soviet seal on the right sleeve and a CCCP-flag (red felt background, square letters) on the left sleeve.
Aboard Salyut-7, they were wearing Salyut-intravehicular suits with a Soviet seal and a square Salyut patch.

On the teleision screens of mission control, the cosmonauts could be seen wearing new type light blue Penguin-suits (distinguished from the earlier Salyut Penguins by the vertical navy colored bars along the chest pockets) during their stay aboard Mir.
These Penguins had a Soviet Seal at the upper left chest, a CCCP-flag (silk type, rounded letters) at the left sleeve and a square Salyut logo at the lower right chest.
We believe the square Mir-patch was not available for this mission yet.
The Orlan-DM spacesuits launched with the Mir base block (or shipped on Progress-25?) for instance, did still have Soyuz-squares as well.

Soyuz TM-2 / EO-2 , February 5 - December 29, 1987

The original first generation Mir-patches, both produced by Zvezda, are not easy to come by - they were not part of any patch presentation set. The patches were used on the flight suits for a relatively short time, since they were replaced by a more stylish Mir-patch early in the program. The wedge-shaped version was used on training Sokol-suits during the entire Mir program, so a number must have gone into the collector's circuit. We managed to get our Mir patch from a dealer in Poland.

Romanenko and Laveikin (right) in their Sokol suits just before launch.
The wedge-shaped Mir-patch was used for the first time.

The cosmonauts of Soyuz TM-2 were launched with a new Sokol suit, which was specially designed for the TM-ship. The typical wedge-shaped Salyut patch on the front of the suits was replaced by a Mir-patch with roughly the same shape and the familiar Zvezda-design. The cosmonauts had a Soviet seal on the right sleeve and a modern type CCCP-flag (rounded letters, fully embroidered type) on the left sleeve. This marked the end of the "square lettered", felt CCCP-flag patch that was seen on many previous missions.

Left: Laveikin (with guitar) and Romanenko in their Penguin-suits aboard Mir.

On their Penguin-suits, the cosmonauts were wearing a 'clipped' version of the same Mir patch that was on the Sokol-suits. Except for this patch, which took the place of the square Salyut logo on the lower right chest, the configuration on the Penguins was the same as the EO-1 crew: a Soviet Seal at the upper left chest and a CCCP-flag (silk, rounded letters) at the left sleeve.
The square Mir patch was also stitched to the Zvezda-produced sleeping bags aboard the station.

A close-up of the 'clipped' patch.

Note the 'clipped' first generation Mir-patch, replacing the square Salyut-logo seen on previous flights.

Soyuz TM-4 / EO-3 , December 21, 1987 - December 21, 1988.

Being a "routine" mission, not involving any foreign cosmonauts, Soyuz TM-4 did not have it's own patch. Crewmember Musa Manarov, however, was the first to use the modern "rounded" Mir-patch on his Sokol. The new patch did not have the six stars and looked more like the old square Soyuz-patch. Levchenko and Titov were the last to use the short-lived wedge-shaped Mir-patch, which had only been used on the TM-2 and TM-3 Sokols before.

Manarov (right) was the first cosmonaut to wear the rounded, modern Mir-patch.

The new Mir-patch on Manarov's suit, seen in an auction.

Soyuz TM-28 / EO-26 , August 1998

Baturin was wearing a new type of Mir patch, produced by Vimpel.
It was embroidered on plain blue nylon.
It can be easily recognized: the "M" of Mir does not start at the center of the patch, but is off to the right.

The crew in their flight Sokols.

Soyuz TM-29 / EO-27 , February 1999

The cosmonauts on launchday.

Note that the mission patch is added and that Haigner has relocated his CNES patch to make room for it.

All three cosmonauts were now wearing the newer Zvezda-Mir patch with letter MIR off to the right and embroidered onto blue nylon.

Soyuz TM-30 / EO-28 , April / June 2000

The crew with their flight Sokols.

Kaleri just before launch.

Note that there is no mission patch attached to the Sokol and that the Mir-patch is of the newest type, with the "M" out of center to the right.

SOYUZ TM-34 , ISS , April / May 2002

(from left to right in the picture) the FAIS logo,
Soyuz TM-34 crew patch,
the logo of Zvezda the company that makes the suits,
the HIV/AIDS awareness ribbon,
and the South African flag.

Soyuz TMA-2 , ISS , April / May 2003

Close up of Ed Lu's Sokol suit,
He was wearing the EXP-7 patch,
Zvezda patch
and NASA patch
on his chest.

Soyuz TMA-8 ; ISS , March / April 2006

The crew for Soyuz TMA-8 was wearing a new Zvezda patch on their Sokols for their offical picture, showing the abbrevation 'MKC'
(Mezhdunarodnaya Kosmicheskaya Stantsiya - International Space Station).
The same sort of Zvezda emblem patch had been used during flights to the Salyut and Mir Space Stations - the ISS Sokols up to that point had an 'empty' Zvezda patch.
The MKC patch was fabricated by Alex Panchenko and produced by Shanghai Dingsheng Fabric Co.

It was never worn on the flight Sokols by any Soyuz crew.

ATTACHMENT

The patch is attached to the Sokol of ' spaceflight participant' Charles Simonyi,

The ISS Expedition 1 crew of Krikalev, left, Gidzenko, and Shepherd upon arrival at Launch Pad 1.

The ISS Sokols have an 'empty' Zvezda patch

Human Space Flight

INTERNATIONAL PATCH HANDBOOK

SOYUZ / MIR - MISSION

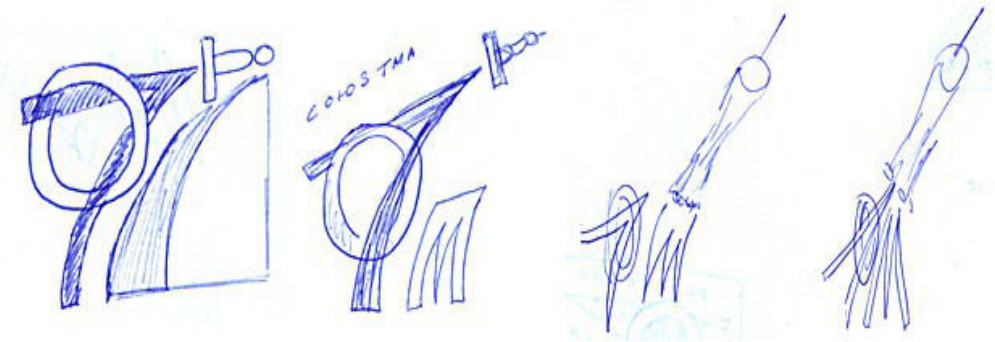
and

SOYUZ / INTERNATIONAL SPACE STATION - MISSION

P R E F A C E

Okay, about the blue number 7 in Aurora. If you look at the color shot of the whole design you'll see the reason for doing the number in blue. With the name in white and the auroras in reds, yellows and even orange it just made sense to do the number in blue.

After Scotty's flight we were really glad I had made the number in blue and that was for idealogical reasons. The Russians/Soviet Union made a big thing out of the name Aurora giving a lot of play in their papers (and internationally) about the fact that the first ship to fire a shot in their revolution against the Tsar was named Aurora. We were just glad I hadn't painted the 7 in red for that particular name. We hadn't even given the USSR's ship Aurora a thought so the choice of color, before Scotty's flight, hadn't even come into play. As I said, it was just the combination of colors that mattered...and I was sure glad of it when the Russians began their crowing about the name. Let's face it, the USSR had a thing about the color red.



Top:
Cece Bibby - the 'mother of all space art' - showing the Aurora-7 logo to Scott Carpenter in 1962, along with her comments from November 2001.

Bottom:
a series of simple sketches, made on December 5, 2010, shows how the idea for a patch developed.

MIR (Russian: Мир, IPA: [ˈmʲir]; lit. Peace or World) was a space station that operated in low Earth orbit from 1986 to 2001, owned at first by the Soviet Union and then by Russia. MIR was the first modular space station and was assembled in orbit from 1986 to 1996.
MIR served as a microgravity research laboratory in which crews conducted experiments in biology, human biology, physics, astronomy, meteorology and spacecraft systems in order to develop technologies required for the permanent occupation of space.
MIR's deorbit was carried out in three stages:
Reentry into Earth's atmosphere (100 km/60 mil) of the 15-year-old space station occurred at 05:44 UTC near Nadi, Fiji. Major destruction of the station began around 05:52 UTC and most of the unburned fragments fell into the South Pacific Ocean around 06:00 UTC.

M I R EXPEDITION 1

From left to right: Leonid Kizim, Vladimir Solovyov

Launch Date : March 13, 1986 , 12:33 UTC
Launch Vehicle : SOYUZ T 15

MIR Crew : - *none* -

Extended MIR Crew : Cdr. Kizim (Russia), FE Solovyov (Russia)

Landing Date : July 16, 1986 , 13:34 UTC

Summary :
Soyuz T-15 was launched on March 13, 1986 within a month following launch of the MIR base block on February 19, 1986. Cosmonauts Leonid Kizim and Vladimir Solovyov docked to the front port of the new station two days later and, as her first crew, they were busy activating it over the next 52 days. On May 5, the cosmonauts undocked Soyuz T-15 from MIR and directed it towards the near-by (2500km!) Salyut-7 station, unoccupied since November 1985. They arrived 29 hours later and used the aft port of the Salyut-7/Kosmos-1686 combination for docking. Aboard Salyut-7 - visited for the final time - they stripped some 400 kg of equipment. They left Salyut-7 on June 25 and flew back to MIR. The cosmonauts returned to Earth in their Soyuz T-15 capsule on July 16, 1986. MIR to remain unmanned until 1987.

SOYUZ T 15

The first mission to MIR did not have its own patch.
The cosmonauts were launched with the typical Salyut configuration on their Sokol suits: a wedge-shaped Salyut patch on their chest, a Soviet seal on the right sleeve and a CCCP-flag (red felt background, square letters) on the left sleeve.

M I R EXPEDITION 2

From left to right: Yuri Romanenko, Aleksandr Laveikin

Launch Date : February 5, 1987 , 21:38 UTC
Launch Vehicle : SOYUZ TM 2

MIR Crew : - *none* -

Extended MIR Crew : Cdr. Romanenko (Russia), FE Laveikin (Russia)

Summary :
Soyuz TM-2 was the first manned version of the Soyuz-TM-spacecraft, specially designed for flights to the MIR station. Soyuz TM-2 was launched on February 5, 1987 with cosmonauts Yuri Romanenko and Aleksandr Laveikin. Their spaceship docked to the front of the Mir/Progress-27 complex two days later. Romanenko and Laveikin made the first spacewalks outside MIR (April 11 to dock Kvant; June 12 and 16 to attach new solar arrays).

On June 16 doctors on the ground started to see something wrong with Laveikin's cardiovascular system. There was no immediate threat to his health, but doctors decided to bring him home as soon as possible (see MIR Visiting Crew 1).

SOYUZ TM 2

The cosmonauts of Soyuz TM-2 were launched with a new Sokol suit, which was specially designed for the TM-ship. The typical wedge-shaped Salyut patch on the front of the suits was replaced by a MIR-patch with roughly the same shape and the familiar Zvezda-design. The cosmonauts had a Soviet seal on the right sleeve and a modern type CCCP-flag (rounded letters, fully embroidered type) on the left sleeve.

M I R EXPEDITION 3

From left to right: Vladimir Titov, Musa Manarov, Anatoly Levchenko

Launch Date : December 21, 1987 , 11:18 UTC
Launch Vehicle : SOYUZ TM 4

MIR Crew : *Cdr. Romanenko (Russia), FE Aleksandrov (Rus.) (new MIR Expedition 2)*

Extended MIR Crew : Titov(Russia), Manarov (Russia), Levchenko (Russia)

Landing Crew : Romanenko (Russia), Aleksandrov (Rus.), Levchenko (Russia)
Landing Date : December 29, 1987 , 9:16 UTC
Landing Vehicle : SOYUZ TM 3

Summary :
Soyuz TM-4 was launched on December 21, 1987. Aboard were Vladimir Titov, Musa Manarov and Anatoly Levchenko. Titov and Manarov took over control of MIR as the EO-3 crew; Levchenko returned to Earth on December 29, 1987, with EO-2 crewmembers Yuri Romanenko and Aleksandr Aleksandrov.

SOYUZ TM 4

Being a "routine" mission, not involving any foreign cosmonauts, Soyuz TM-4 did not have it's own patch.

Crewmember Musa Manarov, however, was the first to use the modern "rounded" MIR-patch on his Sokol (patch above).
The new patch did not have the six stars and looked more like the old square Soyuz-patch.

M I R EXPEDITION 6

From left to right: Anatoly Solovyev, Aleksandr Balandin

Launch Date : February 11, 1990 , 6:16 UTC
Launch Vehicle : SOYUZ TM 9

MIR Crew : *Cdr. Viktorenko (Russia), FE Serebrov (Russia)*

Extended MIR Crew : Solovyev (Russia), Balandin (Russia)

Landing Crew : Viktorenko (Russia), Serebrov (Russia)
Landing Date : February 19, 1990 , 4:36 UTC
Landing Vehicle : SOYUZ TM 8

Summary :
During docking, cosmonauts aboard MIR noticed that three of the eight thermal blankets on the descent module of the approaching Soyuz-TM 9 spacecraft had come loose from their attachments. While on board, the EO-6 crew conducted an extensive programme of geophysical and astrophysical research, experiments on biology and biotechnology and work on space materials science.
A first EVA was conducted on July 17, (7h 16m), in which Soyuz TM-9 thermal blankets was repaired. Another EVA was performed on July 26 (3h 31m), in order to repair the Kvant2 Module hatch, but this failed.

SOYUZ TM 9

The mission did not have any official patch.

The cosmonauts were launched with a standard patch configuration on their Sokols: a second generation MIR-patch at the front of their suits, a CCCP flag (rounded letters, fully embroidered) on the left sleeve and a Soviet seal (yellow border) at the left lower chest.

M I R EXPEDITION 7

From left to right: Gennadi Manakov, Gennady Strekalov

Launch Date : August 1, 1990 , 9:32 UTC
Launch Vehicle : SOYUZ TM 10

MIR Crew : *Cdr. Solovyev (Russia), FE Balandin (Russia)*

Extended MIR Crew : Manakov (Russia), Strekalov (Russia)

Landing Crew : Solovyev (Russia), Balandin (Russia)
Landing Date : August 9, 1990 , 7:34 UTC
Landing Vehicle : SOYUZ TM 9

Summary :
While on board, the crew conducted an extensive programme of geophysical and astrophysical research, experiments on biology and biotechnology and work on space materials science.
They also performed extensive maintenance and repair work on the damaged hatch of the Kvant-2-module. This repair was only partially successful.

SOYUZ TM 10

The mission did not have any official patch.

The cosmonauts were launched with a standard patch configuration on their Sokols: a second generation MIR-patch at the front of their suits, a CCCP flag (rounded letters, fully embroidered) on the left sleeve and a Soviet seal (yellow border) at the left lower chest.

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