

SPACE VEXILLOLOGY

Thirty Years After the First Moon Landing

Andreas Herzfeld

Abstract :

The first space vehicles had only an inscription indicating the country or agency responsible for the flight, e.g. CCCP, United States, CNES. Only with the introduction of the spacecraft Gemini in 1965-65 did a flag begin to appear on a spacecraft. Apollo astronauts wore the US flag on their left sleeve. The flag of the United States was hoisted on the moon in 1969.

Starting with the Soyuz-Apollo (1975) and Interkosmos (since 1978) programs, Soviet cosmonauts wore the Soviet flag on their left sleeve. Soviet spacecraft for multinational programs showed the Soviet flag. Today all countries use a flag for identifying their own astronauts/cosmonauts/euro-nauts and spacecraft. The space organisations Interkosmos and ESA have their own flags.

This year (1999) we celebrate the 30th anniversary of the first moon landing. Neil Armstrong, the first man to step on the moon on 21 July 1969, spoke the famous words: "That's one small step for man, one giant leap for mankind." Together with Edwin Aldrin, he then hoisted the flag of the United States on the moon (Fig. 1). Succeeding Apollo missions also hoisted the Stars and Stripes.

The use of a flag in space exploration began only after 1964-65. Following the Soviet-American missions of 1974-75, a flag was used in addition to the name of the country or agency responsible for the flight.

1. Launch Vehicles, Satellites, Spacecraft and Space Stations

The Soviet Union launched the first satellite, 'Sputnik', on 4 October 1957. Neither this satellite (fig. 2) nor its launch vehicle show any sign of its country of origin. After the first successful satellite launch by the U.S.A., the Soviet Union began marking its spacecraft with the inscription CCCP (USSR) (fig. 3). Until the breakup of the USSR, the Soviets used a flag on their space vehicles only in case of multinational programs. The name of the craft, e.g., 'Soyuz', 'Salyut', 'Mir', was normally shown in Cyrillic letters in addition to the inscription CCCP (figs. 4-6). A first exception was the Soviet space shuttle 'Buran', which is marked both with the Soviet flag and the inscription CCCP (fig. 7). The satellite 'Cosmos 782', launched on 25 November 1975, is another exception (fig. 8): The flags of member-countries of BION (Russian acronym for Investigation of the Effects of Space Flight on Living Organisms) - USSR, U.S.A., CSSR, France, Romania and Hungary - are painted on the bottom of the craft.

Russia first began to mark its spacecraft with the Russian flag with the flight of 'Soyuz' in 1992 (fig. 9). The Soviet satellites that landed on the moon, Mars or Venus had only the inscription CCCP. Different pennants (Russian: *vympeľ*) with typical Russian inscriptions were on board (figs. 10-12). The launch vehicles for Interkosmos satellites had only the Latin inscription INTERKOSMOS (fig. 13).

Developments in the United States were quite different. The first rockets had only the inscription (fig. 14). The USAF rockets were additionally marked with the US Air Force roundel (fig. 15). The spacecraft 'Gemini' (fig. 16) was the first to show the US flag (first launch on 8 April 1964). The launch vehicle 'Saturn V' has been regularly marked with the US flag since 9 November 1967 (fig. 17). When foreign satellites were launched by the United States, the flag of the foreign country was indicated; for example, the launch vehicle 'Delta' carrying the satellite Anik 1 was decorated with the Canadian flag (fig. 18). Very interesting are the images of the US flag on the space shuttle: on the left side of the shuttle the flag is shown normally, while the right side shows a mirror image with the canton at right (fig. 19).

The French launch vehicles (fig. 20) had the inscription CNES (Diamant, 26 November 1965). France's space engineering is the basis for the European launch vehicle 'Ariane'. Ariane 1 on its first launch on 24 December 1979 already showed the standard ESA markings: the ESA logo and the

flags of ESA members arranged in three rows (fig. 21). Japanese launch vehicles had the inscription 'Nippon' and a point surrounded by a thin red circle. The Australian launch vehicle 'Sparta Redstone' and the satellite WRESAT (launched on 29 November 1967) show a kangaroo (figs. 22, 23). As one can see, the kangaroo symbol is well established in Australia and may well be a contender as a component of any new Australian flag.

2. Cosmonauts and Astronauts

Yuri Gagarin was the first man launched into space on 12 April 1961. The inscription CCCP appears on his helmet (fig. 24). Soviet cosmonauts following Gagarin do not have a flag on their space suits. Only with the start of the Soyuz-Apollo program in 1975 did Soviet cosmonauts start to wear the Soviet flag on their left sleeve. Above the flag is the inscription CCCP. Since 1978 many foreign cosmonauts came on board the space stations 'Salyut 7' and 'Mir' (figs. 25-27). They wore their country's flag on the left sleeve. Over the flag was the country's name in the respective language. Since 1992 the Russian flag and the inscription POCC?? (Rossiya) are used (fig. 28).

The first American astronauts did not have a flag on their space suits (fig. 29). During preparation for the moon landing, the astronauts started to wear the US flag on the left sleeve. Foreign hosts on board American spacecraft have two flags on their space suits: on the left sleeve the US flag and on the right sleeve their country's flag. Sometimes the country name is indicated above or beneath the flag (figs. 30-32).

The Euronauts working for ESA are an exception. They wear a black patch with the flags of all ESA members. These patches exist in three variants: With all flags arranged in several rows - the rule on board Soviet/Russian spacecraft, (fig. 33), or arranged in a circle or in an oval - the rule on board US spacecraft, (fig. 34).

3. Space Organizations

Soviet space organizations did not use a distinctive flag, to my knowledge. The successor Russian space organizations use the Russian flag. NASA have its own flag but uses, when necessary, the US flag. The NASA flag was introduced on the 5 November 1959. The NASA seal is in the center of a blue field. On ill. And you see the variant for the Flight Research Center. The NASDA flag has its logo of light blue on a white background. The former organization Interkosmos (USSR and other socialist countries) had a white flag with the colored Interkosmos Logo in Cyrillic or Latin letters (INTERKOSMOS or ?HTERKOCMOC, fig. 35) in the centre. A variant of this logo has the inscription INTERCOSMOS.

Only the ESA has its own flag. When I asked ESA about its official flag, I received the following answer: A white flag with the ESA logo (in light blue, A.H.) in the centre. However, on the official launch photographs one notices a medium-blue flag with a white ESA logo in the centre (fig. 34), that is, precisely the reverse of the information given to me! Commemorative First Day Envelopes issued during joint Space Shuttle-Mir missions showed two interesting flags: the Russian flag with the RKA logo and the US flag with the NASA logo (fig. 37).

Notes

1 Anne M. Platoff is not right. She wrote: "NASA's spacecraft and launch vehicles have *always* (italics mine) been decorated with flags" (A.M. Platoff: "Where no flag has gone before"; *Raven* 1(1994), 3-16).

Abbreviations

CCCP - Union of Soviet Socialist Republics (USSR)
CNES - Centre national d'études spatiales (France)
CSSR - Czechoslovakian Socialist Republic
ESA - European Space Agency
ESRO - European Space Research Organisation
NASA - National Aeronautics and Space Administration (U.S.A.)
NASDA - National Space Development Agency (of Japan)
RKA - Rossiyskoye Kosmitcheskoye Agentsvo (Russian Space Agency)
SKYLAB - Sky Laboratory
USAF - United States Air Force
WRESAT - Weapons Research Establishment Satellite

Sources

This writer is not aware of any other publication on this theme (excluding the paper of A.M. Platoff). This paper is the result of a thorough study of several hundred pictures found in the following books and CD-ROMs. The photographs were taken by TASS, ITAR-TASS, CNES and ESA. ->

Books

Alekseyev, V. A. Yeremenko, A. Tkatchov: *Kosmitchekoye Sodrushestvo, Moskva Mashinostroyeniye 1987*, 2nd ed.
Glushko, V. (ed.): *Kosmonavtika Enziklopediya*, Moskva Izdatelstvo Sovyetskaya Enziklopediya, 1985
Pfafe, H., P. Stache: *Raumflugkörper, Ein Typenbuch*, Berlin Transpress Verlag, 1973, 2nd ed.
Stache, P.: *Raketen*, Berlin Transpress Verlag, 1981

CD-ROMs

Abenteuer Raumfahrt, Der Griff nach den Sternen, Verlag R. Kleinegrüber
Encyclopedia Astronautica, Mark Wade, 1999
Das neue interaktive Weltraumlexikon, Weltbild Software, 1997

Internet

ESA- ESA homepage
NASDA- NASDA homepage
NASA- NASA homepage

Illustrations (These may be accessed on the author's website :

<http://www.dr-herzfeld.de/spacevex.zip>)

- 1- US flag on the Moon (A)
- 2- Sputnik 1 (P)
- 3- Launch Vehicle Standard (USSR)(S)
- 4- Space Craft Soyuz (A)
- 5- Space Station Salyut (A)
- 6- Space Station Mir (A)
- 7- Space Shuttle Buran (E)
- 8- Cosmos 782 (K)
- 9- Russian Space Craft Soyuz (W)
- 10- Soviet Moon Pennant (K)
- 11- Soviet Mars Pennant (K)
- 12- Soviet Venus Pennant (K)
- 13- Launch Vehicle INTERKOSMOS (K)
- 14- Launch Vehicle Atlas (S)
- 15- Launch Vehicle Atlas- USAF (S)
- 16- Space Craft Gemini (P)
- 17- Launch Vehicle Saturn V (S)
- 18- Satellite Anik 1 (S)
- 19- Space Shuttle - Right Side (NASA)
- 20- Launch Vehicle Diamant (S)
- 21- Launch Vehicle Ariane 1 (K)
- 22- Launch Vehicle Sparta Redstone (S)
- 23- Satellite WRESAT (S)
- 24- Cosmonaut Leonov (P)
- 25- International Space Flight USSR-CSSR (K)
- 26- International Space Flight USSR-GDR (K)
- 27- International Space Flight USSR-France (I)
- 28- Russian Cosmonaut (ESA)
- 29- Mercury astronauts (W)
- 30- NASDA astronaut Doi (NASDA)
- 31- Canadian astronaut Hadfield (NASA)
- 32- Belgian astronaut Frimout (ESA)
- 33- Euronaut Merbold (W)
- 34- Euronauts Nicollier and Cheli (ESA)
- 35- Interkosmos flag (I)
- 36- ESA flag (ESA)
- 37- NASA and RK flags (Archiv Herzfeld)



Fig. 1

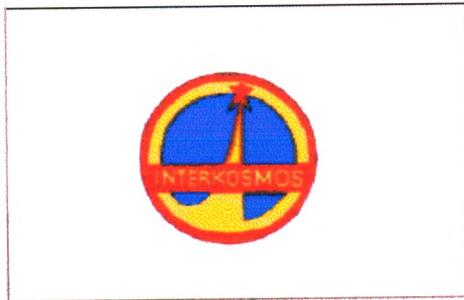
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Dr. Andreas Herzfeld was born on 18 July 1958 and studied medicine from 1977 to 1983 in Krasnodar, in the Soviet Union. He is currently working in private medical practice. In 1995 Dr. Herzfeld was a co-founder of the *Deutsche Gesellschaft für Flaggenkunde* (the German Flag Society) and has been its Chairman since 1997. He has published several articles in *Flaggenkurier*. In 1997 he delivered a paper on the flags of the Leipzig Fair at the 17th ICV in Cape Town, South Africa.

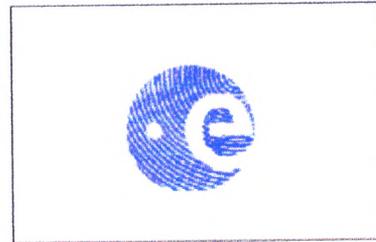
Andreas Herzfeld : Space Vexillology, Col. Plate I



Astronaut Duque with blue ESA flag



Interkosmos Flag



ESA Flag



NASA Flag and Emblem



NASDA Flag