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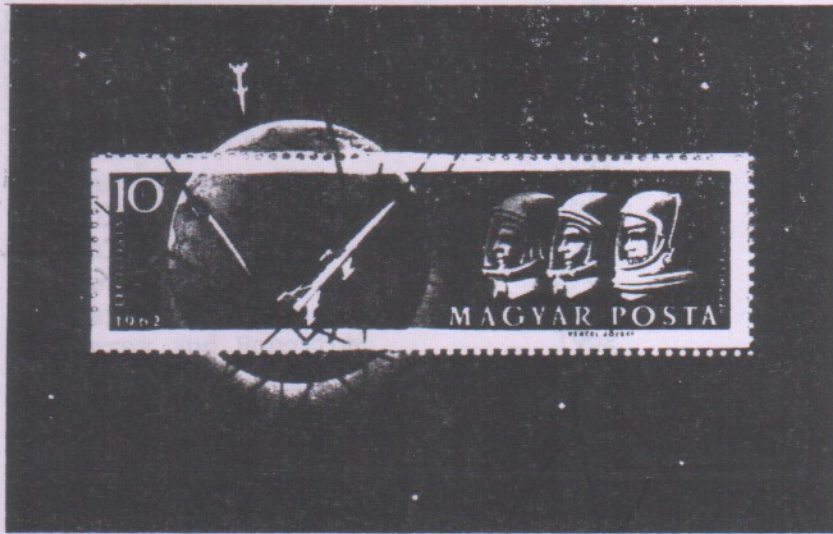
SPACE PHILATELIC HANDBOOK

November 1962

S P A C E

Philatelic

Handbook



SPACE PHILATELIC HANDBOOK

November 1962

The author's research for his own collection of stamps relating to the conquest of space has resulted in the availability of this Handbook. In line with the topical nature of the collection, strictly chronological order is not observed. Instead, all issues are arranged in topical groups numbered from 1 through 23, the order within each topical group corresponding with the author's concept of historical development.

Prices are average current retail prices for fine copies.

This Handbook does not constitute an offer to buy or sell the stamps described.

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1. SCIENCE FICTION

Jules Verne, 1828-1905, was the first and one of the greatest of the modern science fiction writers. His novel "From the Earth to the Moon," written in 1873, aroused worldwide interest in space travel and set the stage for the later writings of H. G. Wells and for the adventures of Buck Rogers. Jules Verne's countdown was "-- 38, 39, 40, FIRE!!, and "--a pillar of flame darts up into the sky, half a mile in height, --and very few indeed of the countless spectators have sense enough left to catch the slightest glimpse of the projectile as it shoots rapidly upwards amidst the dazzling, blinding, blasting glare!"

1-1 1955 MONACO, 200 fr blue and gray 2.50 1.50
Sc C45. Jules Verne and his blastoff.

2. ASTRONOMY

The study of space until 1957 was limited to astronomical observations of celestial objects and radiation.

2-1 1942 MEXICO, 2¢ violet and blue 1.25 10
Sc 774. Orion Nebula.

2-2 5¢ blue 1.25 35
Sc 775. Eclipse of the sun.

2-3 10¢ orange and indigo 1.25 20
Sc 776. Spiral galaxy.

2-4 20¢ green and indigo 1.25 30
Sc C123. Spiral galaxy.

2-5 40¢ red and indigo 1.25 85
Sc C124. Planetary nebula.

2-6 1 p orange and black 1.25 80
Sc C125. Star sequence diagram.

2-7 1948 UNITED STATES, 3¢ blue 6 4
Sc 966. FDC 8/30/48. Ptg 61,120,010. Mt. Palomar Observatory, whose dedication had great public notice. Its 200-inch reflector telescope can see objects one billion light years away.

2-8 1949 JAPAN, 8 y blue-green 30 15
Sc 478. Telescope.

2-9 1952 JAPAN, 5 y purple 40 15
Sc 552. Southern Cross constellation.

2-10 10 y green 65 30
Sc 553. Globe and Big Dipper.

2-11 1953 JAPAN, 10 y blue 40 20
Sc 591. Observatory and stars.

3. EARLY ROCKETS

The science of rocketry, developed in Germany during World War II to produce the V-2, was carried to the United States and Russia after 1945. Devoted scientists and rocketeers such as Wernher von Braun helped create potent military rockets, IRBM's, and ICBM's. From these, it was a logical step to orbit artificial satellites. In two remarkable articles in Colliers in 1952 Dr. von Braun pointed the way to space travel. His first article opened: "Within the next 10 or 15 years, the earth will have a new companion in the skies, a man-made satellite--". His second article began: "Here is how we shall go to the moon." His courage contributed to the American space program.

3-1	1944 GERMANY, 25 pf + 15 pf purple Sc B268. Military rockets.	30	30
3-2	1948 UNITED STATES, 3¢ red brown Sc 976. FDC 11/5/48. Ptg 63,490,000. Fort Bliss and military rocket blasting off.	10	8
3-3	1957 RUSSIA, 40 k blue and brown Sc 1991. Konstantin E. Tsiolkovsky, rocket pioneer, and a rocket on a Saturn satellite. In 1933, Tsiolkovsky, the father of Russian cosmonautics, sent a liquid fuel rocket up several miles. See also 5-3.	30	10
3-4	1953 MONACO, 10 fr blue Sc J53. Rocket, triangle stamp, issued se-tenant at the base with 10 fr blue, Da Vinci's flying machine.	40	40
3-5	1956 MONACO, 30 fr (indigo) on 10 fr blue Sc 388. 3-4 surcharged.	60	60
4.	<u>SATELLITES AND THE INTERNATIONAL GEOPHYSICAL YEAR</u>		
	On July 29, 1955, the White House announced plans to launch an earth satellite during the IGY, July 1, 1957 to Dec. 31, 1958. The intention was announced to share the knowledge gained in this endeavor with other nations, over the objections of some military advisors. The Russians had announced similar plans as early as November, 1953.		
4-1	1956 ITALY, 25 l. blue Sc 717. Globe and satellites. Issued for the 7th Inter- national Astronautical Congress in Rome, this was the first stamp to depict a man-made satellite.	90	10
4-2	1957 RUSSIA, 40 k brown, yellow, and blue Sc 1957. Telescope.	20	6
4-3	40 k yellow and blue Sc 1958. Meteor trail.	20	6
4-4	40 k purple Sc 1959. Rocket. Issued for the IGY.	20	8
4-5	1958 UNITED STATES, 3¢ black and orange Sc 1107. FDC 5/31/58. Ptg 128,815,200. Solar chromo- sphere and prominences, issued for the IGY.	6	4
4-6	1958 ECUADOR, 1.80 s blue Sc 650. Globe and satellites, for the IGY.	30	20
4-7	1958 HAITI, 10¢ blue and brown Sc 424. Vanguard satellite detail.	4	4
4-8	50¢ green and red-brown Sc 426. Radio telescope.	20	20
4-9	50¢ blue and brown Sc C119. Vanguard satellite detail.	20	20
4-10	2 g blue and red Sc C121. Radio telescope.	80	25
4-11	50¢ + 1 g + 1.5 g + 2 g various colors Sc C121A. Imperf. souvenir sheet containing 4-9, 4-10, 1 g bathysphere, and 1.5 g penguins. Inscribed in border "Annee Geophysique 1957-1958".	3.50	2.25

4-12	1958 INDONESIA, 10 s green, pink, and blue	3	2
4-13	15 s violet, gray, and green	4	3
4-14	35 s brown, blue, and pink	4	3
4-15	50 s blue, red-brown, and gray	6	5
4-16	75 s black, violet, and buff Sc 460-464. Globe with satellites, for the IGY.	8	6
4-17	1958 YUGOSLAVIA, 300 d blue Sc C58. Moon and globe with satellites.	2.50	75

5. SPUTNIK I

On October 4, 1957, the Soviet Union announced that the first man-made satellite was circling the earth every 96 minutes at altitudes of 140 to 560 miles. The orbital inclination of 65° to the equator carried it over most of the major cities of the world. Visual sightings of the 184-lb., 23-inch sphere were reported by many, including the "Moonwatch" teams hastily called into action. Amateur radio operators received its "beeps" on 20.005 megacycles until its transmitter died on October 27. As it passed over the Northeast in the early hours of October 12, it had the brightness of Venus. Radio Moscow broadcast daily schedules of its passes over scattered cities until it fell into the atmosphere on January 4, 1958.

5-1	1957 RUSSIA, 40 k slate	35	8
5-2	40 k blue Sc 1992-3. Sputnik I circling the earth, with date.	35	8
5-3	40 k blue and brown, overprinted (black) Sc 2021. 3-3 overprinted "4/X-57" and inscription.	3.75	2.25
5-4	1957 GERMAN DEMOCRATIC REPUBLIC, 10 pf blue Sc 370. Drawing of Sputnik I.	10	4
5-5	1958 POLAND, 40 g blue and purple Sc 799. Globe and satellites.	3	3
5-6	2.5 z blue Sc 822. Rocket and satellite, for the IGY.	20	8

6. SPUTNIK II

On November 3, 1957, the Soviet Union placed Sputnik II in an eccentric orbit from 160 to 1062 miles up. The payload of 1120 lbs. startled all observers, as did the fact that a dog named Laika was aboard. The orbit was inclined 65° to the equator which made this satellite also visible to most populated centers. Laika's reactions to space flight were telemetered to earth until she died on November 10, after making about 100 orbits and traveling two and a half million miles. The satellite itself disintegrated in the atmosphere on April 14, 1958.

6-1	1958 RUSSIA, 20 k pink and black	12	4
6-2	40 k green and black	20	5
6-3	60 k brown and black	35	5
6-4	1 r blue and black Sc 2032-5. Figure with arms outstretched in greeting to satellite. Inscribed "Second Soviet Earth Satellite."	50	12
6-5	1957 CZECHOSLOVAKIA, 30 h yellow and purple Sc 836. Radio telescope and small globe with satellite.	8	3
6-6	75 h blue and maroon Sc 838. Earth and Sputnik II.	18	3

6-7	1957 ROMANIA, 25 b blue	7	4
6-7A	6-7 overprinted (red)	14	8
6-7B	6-7A, inverted overprint	75	-
6-8	25 b blue-green	7	4
6-8A	6-8 overprinted (red)	14	8
6-8B	6-8A, inverted overprint	75	-
	Sc C49-50. Sputnik I over the Kremlin. Issued se-tenant with 6-9 and 6-10 and a gray or brown label respectively, showing the launch dates of Sputniks I and II. Sheets are in the order 25 b - label - 3.75 l. - 25 b - label, and overprints (for the Brussels Fair) are in the order small star - small star with inscription - large star.		
6-9	3.75 l. blue	1.00	12
6-9A	6-9 overprinted (red)	1.90	35
6-9B	6-9A, inverted overprint	9.25	-
6-10	3.75 l. blue-green	1.00	12
6-10A	6-10 overprinted (red)	1.90	35
6-10B	6-10A, inverted overprint	9.25	-
	Sc C51-2. Earth with two satellites in orbit. See note after 6-8B.		
6-11	1.20 l. blue and brown	25	8
6-12	1.20 l. blue-green and brownish red	25	8
	Sc 1200-01. Laika and Sputnik II.		

7. SPUTNIK III

On Dec. 6, 1957, the United States failed openly to orbit a 3-lb. Vanguard satellite when the vehicle exploded after two seconds. On January 31, 1958, a U.S. Army 4-stage Jupiter C placed a 30.8-lb. rod-shaped satellite, Explorer I, in an orbit at 224 to 1573 miles. It discovered the Van Allen radiation belts circling the earth. Further American efforts were:

February 5, 1958. Vanguard failure.
 March 5, 1958. Explorer II failed to orbit.
 March 17, 1958. Vanguard I, 3.25 lbs., orbited 409-2513 miles.
 March 26, 1958. Explorer III, 31 lbs., orbited 125-1735 miles.
 April 28, 1958. Vanguard failure.

On May 15, 1958, the Russians launched the cone-shaped Sputnik III into orbit. Its payload weight of 2925 lbs. again confirmed that the Russian booster rockets had greater thrust than those available to the West.

7-1	1958 RUSSIA, 40 k purple, green, and red	25	2
	Sc 2083. Sputnik III in orbit. Printed with an attached label describing the launch of the 1327-kilogram satellite to 1860 kilometers as part of Russian participation in the Geophysical Year.		
7-2	1958 BULGARIA, 80 s greenish blue	40	15
7-2A	7-2, imperforate.	1.00	50
	Sc C76. Sputnik III in orbit.		
7-3	1958 ROMANIA, 3.25 l. slate and orange	90	12
	Sc C56. Earth with band labelled "Sputnik 3".		
7-4	1959 POLAND, 40 g blue and gray	5	5
7-4A	7-4, imperforate.	12	12
	Sc 875. Sputnik III above the earth.		
7-5	60 g brown-red and black	6	5
7-5A	7-5, imperforate.	15	12
	Sc 876. Sputnik booster rocket.		

7-6	2.50 z blue and green	30	12
7-6A	7-6, imperforate.	70	30
	Sc 877. Sputnik II in orbit. This issue commemorated the launching of Lunik II (see below).		

8. LUNIK I

Between May and December, 1958, the United States launched Explorer IV into orbit, sent up the space probes Pioneer I and III, and broadcast President Eisenhower's Christmas message from an orbiting Atlas satellite in Project Score. On January 2, 1959, the Soviets launched Lunik I, which passed within 4600 miles of the moon on January 4 and went into orbit around the sun. Man's first artificial planet weighs 3,245 lbs. and circles the sun every fifteen months.

8-1	1959 RUSSIA, 1 r blue, red, and yellow Sc 2160. Lunik and Sputniks over Moscow.	40	10
8-2	40 k blue Sc 2188. Path of Lunik on the globe.	15	3
8-3	40 k pink and brown Sc 2187. Path of Lunik to the moon.	15	3
8-4	1959 BULGARIA, 2 l. blue and yellow	50	25
8-4A	8-4, imperforate. Sc C77. Earth, moon, and Lunik.	1.25	50
8-5	1959 MONGOLIA, 30 m purple and yellow-green Rocketship, moon, and planets.	15	-
8-6	50 m blue, green, and red Space capsule, earth, and moon.	25	-

9. LUNIK II

The United States launched the second artificial planet, Pioneer IV, into orbit on March 3, 1959, and tracked it for 407,000 miles. On September 12, 1959, Lunik II was launched by the Russians. At 5:02:24 PM EDT, Sept. 13, the 858-lb. package hit the surface of the moon at 2 miles per second. Presumably the Soviet coat of arms was vaporized along with the capsule.

9-1	1959 RUSSIA, 40 k blue, red, and yellow-brown Sc 2266. Earth, moon, and Lunik II.	25	8
9-2	40 k gray, rose, and red Sc 2267. Lunik II over the Kremlin.	25	8
9-3	1 r blue and yellow Sc 2235. Rocket and globe.	45	8
9-4	1959 CZECHOSLOVAKIA, 60 h blue and red Sc 938. Rocket and moon with Soviet flag.	20	3
9-5	1959 GERMAN DEMOCRATIC REPUBLIC, 20 pf red Sc 454. Moon and trajectory with banner.	10	3
9-6	1959 HUNGARY, 60 f blue and yellow	7	5
9-6A	9-6, imperforate. Sc 1216. Moon and rocket.	45	30
9-7	1 fo red and yellow	14	7
9-7A	9-7, imperforate. Sc 1217. Observatory and sun.	85	40
9-8	5 fo brown and maroon	70	45
9-8A	9-8, imperforate. Sc 1218. Sputnik and Vanguard satellites.	4.25	2.75

9-9	9-6 overprinted (red) 22 ^h 02'34"	15	7
9-9A	9-9, imperforate. Sc 1262.	1.25	50
9-10	1959 ROMANIA, 3.25 l. blue on salmon Sc C58.	95	10
9-11	9-10 overprinted (red) h.00.02'.24" Sc C70. Lunik I on takeoff. The overprint commemorates the impacting of Lunik II on the moon.	1.50	25
9-12	1960 BULGARIA, 1.25 l. blue, black, and yellow Sc C79. Rocket approaching the moon.	30	15

10. LUNIK III

Two years after Sputnik I, on October 4, 1959, the Russians sent the 614-lb. Lunik III around the moon. On October 6, it passed 4400 miles from the moon, and on October 7, it photographed the back side of the moon from 40,000 miles. On October 18, it had returned to within 25,000 miles of the earth and was triggered to transmit the pictures back to ground stations. Men got their first look at 70% of the other side of the moon.

10-1	1959 RUSSIA, 40 k purple Sc 2259. Path of Lunik III around the moon.	30	8
10-2	1960 RUSSIA, 40 k blue and yellow Sc 2309. Lunik II above the moon.	20	4
10-3	60 k blue and yellow-green Sc 2310. The back side of the moon.	30	5
10-4	1959 ROMANIA, 1.55 l. blue Sc C73. Otvazhnaya (a dog) and Marfusha (a rabbit), recovered from space July 2, 1959.	40	8
10-5	1.6 l. blue on buff Sc C74. Moon's far side, with 8 new lunar features.	45	8
10-6	1.75 l. slate blue Sc C75. Orbit of Lunik III.	50	8
10-7	1960 BULGARIA, 1.25 l. blue-green and yellow	35	15
10-7A	10-7, imperforate. Sc 1093. Earth with orbit of Lunik III.	75	75

11. MAY 15, 1960

On this date, Russia launched a 5-ton satellite into a 200-mile orbit. On signal from the ground, a 5500-lb. cabin separated from the satellite and dropped into the atmosphere. No attempt to recover the cabin was reported.

11-1	1960 RUSSIA, 40 k blue and orange Sc 2350. Rocket and globe.	20	5
11-2	1960 ROMANIA, 55 b blue Sc C88. Face and rocket.	20	3

12. BELKA AND STRELKA

On August 10, 1960, the United States launched Discoverer XIII, and the next day the 300-lb. capsule was separated and recovered from the ocean 330 miles northwest of Honolulu. This first recovery of a man-made object from orbit was eclipsed on August 19, when a 10,000-lb. satellite containing the two dogs Belka and Strelka was recovered by the Russians after 17 orbits, within 6 miles of the predicted target area. The dogs were in good condition.

12-1	1960 RUSSIA, 40 k violet and yellow	20	5
12-2	1 r blue and orange Sc 2383-4. Rocket, inset of dogs.	50	10
12-3	1961 BULGARIA, 1.25 l. orange and turquoise Sc C80. Rocket, inset of Belka and Strelka.	35	15
12-4	2 l. gray and maroon Sc C82. Four space dogs.	40	20
13.	<u>ECHO I</u> Echo I was launched into a 1000-mile orbit on August 12, 1960. The 100-foot inflated sphere became the first communications satellite when radio signals were reflected from it between Holmdel, New Jersey, and Goldstone, California. The broadcast used 10,000 watts at 960 megacycles, and ruby masers were needed to receive the echo. On May 3, 1962, Echo I was used again to bounce the television picture "M.I.T." from Camp Parks, California, to Westford, Mass.		
13-1	1960 UNITED STATES, 4¢ violet Sc 1173. FDC 12/15/60. Echo I above the earth.	6	2
14.	<u>GENERAL 1960-1961</u>		
14-1	1961 CZECHOSLOVAKIA, 20 h purple and pink Sc 1031. Cosmic rocket launch.	5	2
14-2	30 h blue, green, and yellow Sc 1032. Sputnik III capsule.	8	3
14-3	40 h red and light green Sc 1033. Cosmic rocket launch.	10	4
14-4	60 h blue and orange Sc 1034. Lunik and the sun!	15	6
14-5	1.60 k green and blue Sc 1035. Lunik III and the moon!	40	16
14-6	2 k maroon and blue Sc 1036. Man in space flight.	50	20
14-7	1961 PERU, 1.00 s blue, yellow, and red Sc C168. The earth and its magnetic equator, for the IGY.	10	5
14-8	1961 RUSSIA, 2 k blue, purple, and black Sc 2491. Dog Zvezdochka and Sputnik V, launched 3/25/61.	20	-
14-9	4 k blue and green Sc 2492. Dog Chernushka and Sputnik IV, Launched 3/9/61. At 4:50 AM EST, Sept. 5, 1962, Sputnik IV broke up and fell near Lake Michigan. A 20-lb. piece of iron fell on a street of Manitowoc, Wisconsin, and was analyzed in Cambridge, Mass. On Sept. 14, it was offered to the Russian delegate at a session of the United Nations, and was not accepted.	30	-
14-10	1 r red and black on aluminum foil	1.80	-
14-10A	14-10 overprinted (red) Sc 2533-4. Rocket and stars. Overprinted "XXII Cvezd KPOC" for the 22nd Communist Congress.	2.00	-
14-11	1961 TURKEY, 30 k brown, orange, and black Sc 1515. Military rockets.	10	-
14-12	1960 CUBA, 8¢ various colors Sc C214. FDC 10/30/60. Plane and satellite, 1930-1960.	28	-

15. VENUS PROBE 1961

Early 1961 was productive of many space achievements. On Jan. 31, a chimpanzee named Ham made an 18-min. 420-mile flight downrange from Cape Canaveral and was retrieved safely. The same day, a Samos reconnaissance satellite was sent into polar orbit from Point Arguelo, Cal. On Feb. 4, Russia launched a 7-ton Sputnik, and on Feb. 12 they detached a "piggy-back" space ship from a satellite and sent it on a 3-months trip towards Venus. Weighing 1415 lbs. and carrying a Soviet flag, it was expected to determine more accurately the size of the Solar System. Radio contact was lost on March 2 before the data was obtained. The silent satellite passed within 62,000 miles of Venus. On March 10, the United States' NASA announced that radar contact with Venus had been established from a ground station in California.

15-1	1961 RUSSIA, 6 k blue and orange Sc 2456. Rocket and globe.	14	3
15-2	10 k blue and yellow Sc 2457. Satellite and path to Venus.	20	4
15-3	1961 HUNGARY, 40 f blue, black, and brown	8	-
15-3A	15-3, imperforate. Sc 1385. Venus rocket.	50	-
15-4	60 f blue, black, and brown	13	-
15-4A	15-4, imperforate. Sc 1386. Venus rocket.	85	-
15-5	80 f blue and black	16	-
15-5A	15-5, imperforate. Sc 1387. Venus rocket.	1.00	-
15-6	2 fo purple and yellow	40	-
15-6A	15-6, imperforate. Sc 1388. Goddess Venus in a crescent moon.	2.80	-
15-7	Souvenir sheet of 4	4.50	-
15-7A	15-7, imperforate. Ptg 970.	-	-
15-7B	15-7, second printing	2.75	-
15-7C	15-7A, second printing So-called Type 3 sheets of 15-7, overprinted with a rocket, are fraudulent.	15.00	-
15-8	1961 BULGARIA, 2 l. blue and orange Sc C83. Rocket launch.	35	20

16. YURI GAGARIN

"The world's first spaceship, Vostok, with a man on board, has been launched on April 12 in the Soviet Union on a round-the-world orbit." So said the Russian radio, while identifying the astronaut as Yuri Alekseevich Gagarin, 27 years old. The 10,460-lb. Vostok left the launching pad at 9:07 AM, Moscow time, and orbited once at 110-187.5 mile altitudes. Two hours after his landing, the announcement was made: "At 10:55 Cosmonaut Gagarin safely returned to the sacred soil of our motherland." On April 14, Khrushchev accompanied him from the airport to Red Square, where he was greeted by the Presidium. Gagarin, the first man to conquer space, made triumphant tours to the Russian bloc nations and to England.

16-1	1961 RUSSIA, 3 k blue	12	3
16-1A	16-1, imperforate. Sc 2463. Portrait of Gagarin.	40	10

16-2	6 k red, blue, and purple	10	3
16-2A	16-2, imperforate. Sc 2464. Rockets and the Kremlin, with attached label with hammer and sickle and statement by Khrushchev.	20	5
16-3	10 k brown, orange, and green	20	5
16-3A	16-3, imperforate. Sc 2465. Gagarin and Vostok.	40	10
16-4	1961 BULGARIA, 4 l. blue and orange Sc C81. Gagarin and Vostok.	75	-
16-5	1961 GERMAN DEMOCRATIC REPUBLIC, 10 pf blue and red Sc 549. Vostok over Russia.	10	-
16-6	20 pf red Sc 550. Gagarin in space ship.	20	-
16-7	25 pf blue Sc 551. Cabin parachuting to earth.	25	-
16-8	1961 HUNGARY, 1 fo blue and brown	30	-
16-8A	16-8, imperforate.	2.25	-
16-9	2 fo blue and brown	60	-
16-9A	16-9, imperforate. Sc 1381-2. FDC 4/25/61. Gagarin in space suit and Vostok I.	4.50	-
16-10	1961 POLAND, 40 g red and black Sc 974. Portrait of Gagarin.	6	2
16-11	60 g blue, black, and red Sc 975. Globe and Vostok's orbit.	8	3
16-12	1961 ROMANIA, 1.35 l. blue Sc C103. Gagarin in space suit.	35	6
16-13	3.20 l. blue	85	14
16-14	3.20 l. red, imperforate. Sc C104. Gagarin in cabin, globe with orbit.	90	45
16-15	1961 CZECHOSLOVAKIA, 60 h red and blue	15	3
16-16	3 k blue and yellow Sc 1042-3. Man in space flight (see 14-6).	75	3
16-17	60 h red and black Sc 1059. Gagarin in Prague, April 28-9, 1961.	15	-
16-18	1.80 k blue and black Sc 1060. Gagarin, rocket, and dove.	45	-
16-19	1962 ALBANIA, 0.50 l. blue	4	-
16-20	4 l. magenta	14	-
16-21	11 l. olive Sc 602-4. Gagarin and Vostok I.	35	-
16-22	16-19 overprinted (red)	25	-
16-23	16-20 overprinted (red)	1.00	-
16-24	16-21 overprinted (red) Overprinted "Posta Ajrore" for airmail. In addition to the overprint, an overall yellowish coat was given.	2.50	-

16-25	1961 NORTH VIET NAM, 6 x purple and orange	15	-
16-25A	16-25, imperforate.	50	-
16-26	12 x green and orange	25	-
16-26A	16-26, imperforate.	90	-
	Gagarin in helmet, and Vostok I.		
	1961 MONGOLIA, (4 values)	95	-
17.	<u>ALAN SHEPARD</u>		
	In full view of television cameras, at 9:34 AM, May 5, 1961, a Redstone rocket lifted Commander Alan B. Shepard Jr. off the Cape Canaveral launching pad. His Freedom 7 Mercury capsule reached 4500 miles per hour and an altitude of 115 miles. After a 15-minute flight, he landed 302 miles away and was lifted by helicopter to the Carrier Champlain. His comment was: "Boy, what a ride!" On July 21, 1961, Virgil "Gus" Grissom repeated the flight, but lost his capsule, the Liberty Bell 7, when it shipped water and was cut loose from the helicopter towing it.		
17-1	1961 SURINAM, 15¢ blue, violet, and green	75	-
17-1A	17-1 sheet of 12, perf. border	10.00	-
17-1B	17-1 sheet of 12, imperf. border	10.00	-
17-2	17-1, second printing, color variation	50	-
17-2A	17-2 sheet of 12, perf. border	7.50	-
17-2B	17-2 sheet of 12, imperf. border	7.50	-
	Sc C28. Gagarin and the earth.		
17-3	20¢ blue, violet, yellow, and black	1.00	-
17-3A	17-3 sheet of 12, perf. border	10.00	-
17-3B	17-3 sheet of 12, imperf. border	10.00	-
17-4	17-3, second printing, color variation	70	-
17-4A	17-4 sheet of 12, perf. border	7.50	-
17-4B	17-4 sheet of 12, imperf. border	7.50	-
	Sc C29. Shepard and Redstone rocket.		
17-5	1961 PARAGUAY, 0.10 g blue and brown	5	-
17-6	0.25 g blue and red	5	-
17-7	0.50 g blue and orange	5	-
17-8	0.75 g blue and green	5	-
	Alan Shepard and Mercury capsule.		
17-9	18.15 g deep blue and green	95	-
17-10	36 g deep blue and orange-red	1.95	-
17-11	50 g deep blue and red	3.00	-
17-11A	50 g deep blue and red, souvenir sheet	7.50	-
	Alan Shepard and planet Saturn. The sheet measures 3 7/8" x 5 1/8", inscribed in border "Correo del Paraguay Diciembre de 1961".		
17-12	0.10 g imperforate, slate and brown	5	-
17-13	0.25 g imperforate, slate and red	5	-
17-14	0.50 g imperforate, slate and yellow-orange	5	-
17-15	0.75 g imperforate, slate and green	5	-
17-16	18.15 g imperforate, turquoise and green	1.25	-
17-17	36 g imperforate, turquoise and orange	2.75	-
17-18	50 g imperforate, turquoise and red	4.25	-
17-18A	50 g imperforate, souvenir sheet, turquoise and red	17.50	-
	Designs the same as (17-5) through (17-11A).		

18. GHERMAN TITOV

On August 6, 1961, 26-year-old Major Gherman Titov was rocketed into a 17-orbit, 25-hour mission from the Soviet Union. His 10,430-lb. ship "Vostok II" ranged from 110 to 150 miles in altitude until it landed after 25 hrs. 18 min. aloft. Titov became a national hero. He had found the trip endurable, as had Belka and Strelka a year previously. Titov admitted to some feelings of nausea after several orbits. On May 3, 1962, Titov met the American astronauts at the National Academy of Sciences in Washington and submitted to a press interview on television. He was noncommittal concerning details of his flight and particularly his method of landing.

18-1	1961 RUSSIA, 4 k blue and claret	20	-
18-1A	18-1, imperforate. Sc 2507. Titov and globe with orbit.	25	-
18-2	6 k brown, orange, and green	25	-
18-2A	18-2, imperforate. Sc 2508. Titov and Vostok II.	35	-
18-3	1961 BULGARIA, 75 s greenish brown Sc C84. Titov in space helmet.	15	-
18-4	1.25 l. purple, blue, and pink Sc C85. Vostok II.	30	-
18-5	1961 GERMAN DEMOCRATIC REPUBLIC, 5 pf purple and red Sc 576. Titov and children with bouquets.	7	-
18-6	10 pf green and red Sc 577. Titov in Leipzig.	7	-
18-7	15 pf violet and blue Sc 578. Titov in space.	10	-
18-8	20 pf red and blue Sc 579. Titov and Walter Ulbricht.	20	-
18-9	25 pf blue and red Sc 580. Vostok II in space.	30	-
18-10	40 pf blue and red Sc 581. Titov and Ulbricht in an open car.	40	-
18-11	1961 POLAND, 40 g red and black Sc 1009. Titov and star.	6	2
18-12	60 g blue and black Sc 1010. Dove and globe with orbit.	10	3
18-13	1961 ROMANIA, 55 b blue Sc C108. Vostok II.	15	4
18-14	1.35 l. purple Sc C109. Titov.	40	6
18-15	1.75 l. red Sc C110. Gagarin and Titov.	50	10
18-16	1961 NORTH VIET NAM, 6 x blue, slate, and orange	10	-
18-16A	18-16, imperforate.	35	-
18-17	12 x blue, brown, and orange	20	-
18-17A	18-17, imperforate. Titov and Vostok II.	65	-

19.	<u>JOHN GLENN</u> Lieutenant Colonel John H. Glenn in the 4265-lb. "Friendship 7" left Cape Canaveral at 9:47 AM on Feb. 20, 1962, atop an Atlas-D missile. At altitudes of 100-162 miles, he travelled 80,428 miles in 4 hrs. 56 min. He saw the blazing lights of Perth, Australia, and he saw thousands of little luminous particles in space outside the capsule. His third orbit was under manual control, and he kept his retro-rocket packet attached to the capsule to prevent loss of his heat-shield. As big flaming chunks came by his window, he said: "It's a real fireball out there." He was greeted at Cape Canaveral by President Kennedy, and later addressed a joint session of Congress.		
19-1	1962 UNITED STATES, 4¢ blue and yellow Sc 1193. FDC 2/20/62. Mercury capsule in flight. This stamp was released simultaneously at 300 cities at the moment of Glenn's safe landing.	6	2
19-2	1962 T030, 0.50 f green	4	-
19-2A	19-2 souvenir sheet of 12 Sc 417. Shepard in helmet. Sheet is 6 3/4" x 8", with 4 central photos of Shepard, Grissom, Gagarin, & Titov.	40	-
19-3	1 f red	4	-
19-3A	19-3 souvenir sheet of 12 Sc 418. Gagarin in helmet. See note after 19-2A.	40	-
19-4	25 f blue	20	-
19-4A	19-4 souvenir sheet of 12 Sc 419. Shepard in helmet. See note after 19-2A.	2.25	-
19-5	30 f purple	25	-
19-5A	19-5 souvenir sheet of 12 Sc 420. Gagarin in helmet. See note after 19-2A.	2.25	-
19-6	100 f (black) on 0.50 f green	70	-
19-7	100 f (red) on 0.50 f green Sc 421. 19-2 surcharged and overprinted "John H. Glenn".	75	-
19-8	1962 HUNGARY, 10 f black, blue, and gold souvenir sheet	2.00	-
19-8A	19-8, imperforate. Sc C209. Ptg 120,000 perf., 15,000 imperf. Gagarin, Titov, and Glenn in space helmets. Sheet is 2 3/4" x 4 1/4". Sheet design of globe with multiple orbits incorporates the stamp as part of the design.	5.50	-
19-9	1962 HAITI, 0.50 g (black) on 5¢ blue and yellow	35	25
19-9A	19-9, inverted overprint	20.00	-
19-9B	19-9, double impression overprint	20.00	-
19-10	1 g green and yellow (black overprint)	60	55
19-10A	19-10, inverted overprint	20.00	-
19-11	1.50 g (black) on 5¢ blue and yellow	90	85
19-11A	19-11, inverted overprint	20.00	-
19-12	2.00 g (black) on 1 g green and yellow	1.10	95
19-12A	19-12, inverted overprint Sc 484-5, C186-7. Diamond shaped, map of Tortuga, overprinted "Exploration Spatiale, John Glenn", and Mercury capsule.	20.00	-
19-13	1962 PANAMA, 5¢ red Glenn and Friendship 7.	10	-
19-14	10¢ yellow Mercury capsule in space.	15	-

19-15	31¢ blue Mercury capsule in orbit.	55	-
19-16	50¢ green Glenn in space helmet.	85	-
19-17	Souvenir sheet Ptg 30,000.	3.00	-

20. GENERAL 1962

The major space events of 1962 were the following:

- Jan. 13. U.S. Discoverer 37.
- Jan. 24. U.S. Composite I.
- Jan. 26. U.S. Ranger III, attempted lunar impact, orbited sun.
- Feb. 8. U.S. Tiros IV, weather observation.
- Feb. 20. U.S. John Glenn (Group 19).
- Mar. 7. U.S. OSO-1, radiation measurements.
- Mar. 16. U.S.S.R. Cosmos I.
- Apr. 6. U.S.S.R. Cosmos II.
- Apr. 23. U.S. Ranger IV, attempted soft instrument landing on the moon. Lost telemetry and crashed at 5963 mph on the far side of the moon at 15.5° S, 229.5° E, at 7:49:53 AM on Apr. 26. Weighed 730 lbs., boosted by Atlas-Agena B, flew for 63 hrs. 59 min. 53 sec.
- Apr. 24. U.S.S.R. Cosmos III, 142-448 miles, 93.8 min., 48°59' inclination.
- Apr. 25. U.S. Saturn 1st stage released 93 tons of water at 65 miles altitude.
- Apr. 26. U.S.S.R. Cosmos IV, 200 miles, recovered Apr. 29.
- Apr. 26. U.S.-British Ariel satellite, 132 lbs., Thor-Delta rocket, from Cape Canaveral for radiation studies.
- Apr. 26. U.S.-Japanese 75-miles probe, Nike-Cajun, Wallops Island.
- Apr. 26. U.S. secret satellite, Atlas-Agena, Point Arguello.
- Apr. 26. U.S. secret satellite, Blue Scout, Point Arguello, failed.
- May 3. TV signal bounced from Echo I (Group 13).
- May 8. U.S. Centaur exploded at Canaveral.
- May 10. U.S. 355-lb. blinking satellite, Thor-Able-Star, failed.
- May 24. U.S. Malcolm Scott Carpenter (Group 21).
- May 28. U.S.S.R. Cosmos V, 126-993 mi., 102.75 min., 49° 4' inclination.
- June 19. U.S. Tiros V, 367-704 mi., 100.5 min., 75° incl., hurricane tracking.
- June 22. U.S. secret satellite, Vandenberg AFB, Thor-Agena.
- June 30. U.S.S.R. Cosmos VI, 126-250 mi., 90.6 min., 49° inclination.
- July 5. Israel launched a 3-stage rocket to 50 miles.
- July 9. U.S. exploded a 1.4-megaton bomb 200 mi. above Johnston Island, seen more than 3000 miles away. Created a new radiation belt that disabled two of our own satellites.
- July 10. U.S. Telstar I (Group 22).
- July 16. U.S. Maj. Robert M. White piloted the X-15 to 59.6 mi. at 3600 mph and skip-landed the rocket plane.
- July 18. U.S. launched a 135-ft. balloon to 950 mi., which descended into the atmosphere after 23 minutes of flight.
- July 21. Egypt launched 4 Al Qahir (The Victor) rockets up to 372 miles.
- July 22. U.S. Mariner I, attempted Venus probe, Atlas-Agena B, destroyed 100 mi. above Canaveral. Omission of a hyphen from the computer instructions caused the \$18 million failure.
- July 28. U.S.S.R. Cosmos VII, 130-229 mi., 65° incl., solar radiation.
- Aug. 5. U.S. secret satellite, Point Arguello, Atlas-Agena, polar orbit, possible Samos.
- Aug. 11. U.S.S.R. Nikolayev and Popovich (Group 23).
- Aug. 18. U.S.S.R. Cosmos VIII, 159-375 mi., 92.93 min., 49° inclination.
- Aug. 20. U.S. disclosed disabling of 40-lb. Injun satellite launched June 29, 1961, and Ariel of Apr. 26, 1962, by the bomb of July 9, 1962, as a result of damage by the electron flux in the new radiation belt.

- Aug. 27. U.S. Mariner II, 447-lb. gold and silver plated Venus probe, 180,000,000-mile launch, by 130-ton Atlas-Agena at 2:53 AM EDT. Mid-course correction of 47 mph on Sept. 4, performed by retro-rocket fired from 1,500,000 mi., put it on course within 20,000 mi. of Venus. On Dec. 14, will measure temp. and cloud structure of Venus by infrared methods.
- Aug. 29. U.S. secret satellite, Vandenberg AFB, polar orbit (Discoverer?).
- Sept. 17. U.S. secret satellite, Vandenberg AFB, polar orbit (Discoverer?).
- Sept. 18. U.S. Tiros VI, Canaveral, 281 lbs., 425-442 mi., 58.3° inclination, 98.7 min., 3-stage Thor-Delta, launched at 4:45 AM EDT.
- Sept. 26. U.S.S.R. Cosmos IX.
- Sept. 28. U.S.-Canada Alouette, Vandenberg, 11:06 PM Pacific time, 597-619.2 mi., 80.84° inclination, Thor-Agena B.
- Oct. 2. U.S. Explorer 14, Thor-Delta, 89 lbs., 185-53,000 mi., 31-hr. orbit, launched 5:11 PM EST, to study solar radiation.
- Oct. 3. U.S. Walter M. Schirra Jr., in Mercury capsule Sigma 7, Atlas booster, launched 8:15 AM EDT, performed uneventful six orbits at 100-176 mi., in 88.5-min. orbit. This was the first Mercury launch on the date originally scheduled. He confirmed Glenn's fireflies, and was sighted over the Indian Ocean as bright as Venus. At 8:53 AM, the TV tape was transmitted of his launch to Europe via Telstar. He landed 9000 yards from the USS Kearsarge. He was sighted at 5:25 PM, 275 mi. NE of Midway Island, landed at 5:29, and emerged on deck at 6:15. He proved the feasibility of prolonged orbit in the Mercury capsule by landing with most of his fuel unused.
- Oct. 9. U.S. secret satellite, Vandenberg, Thor-Agena. Possible Discoverer.
- Oct. 17. U.S.S.R. Cosmos X.
- Oct. 18. U.S. Ranger 5, attempted instrument moon landing. Solar batteries malfunctioned, missed the moon by 300 miles, orbited the sun.
- Oct. 20. U.S.S.R. Cosmos XI.
- Oct. 27. U.S. Explorer 15, Thor-Delta, 98 lbs., 170-10,360 mi., launched 6:15 PM EST, Canaveral, to study new radiation belt formed July 9.
- | | | | |
|-------|---|----|---|
| 20-1 | 1962 CZECHOSLOVAKIA, 30 h red-brown and blue
Sc 1105. Symbolic figure, cosmic research. | 7 | - |
| 20-2 | 40 h brown and black
Sc 1106. Soviet cosmic rocket launch. | 9 | - |
| 20-3 | 60 h pink and blue
Sc 1107. Vostok II. | 13 | - |
| 20-4 | 80 h magenta and green
Sc 1108. Automatic rocket. | 18 | - |
| 20-5 | 1 k black and green
Sc 1109. Moon station. | 22 | - |
| 20-6 | 1.60 k green and buff
Sc 1110. Television relay satellite. | 35 | - |
| 20-7 | 1962 RUSSIA, 10 k red, blue, purple, and yellow, with attached label blue and orange | 20 | - |
| 20-7A | 20-7, imperforate | 45 | - |
| 20-7B | 20-7 with attached label violet and orange | 20 | - |
| 20-7C | 20-7B, imperforate
Sc 2578. Sputnik outline above a globe, Russian inscription "First anniversary of manned flight in the cosmos." Label bears Gagarin's signature and "12-IV-1961-12-IV-1962." | 45 | - |
| 20-8 | 6 k black, blue, and violet
Sc 2586. Rocket capsule in space, and Russian inscription "Socialism, this is also the reliable starting platform from which the Soviet Union launches its cosmic vessels.- N. S. Khrushchev." | 15 | - |

20-9	10 k blue, black, and orange	20	-
20-9A	20-9, imperforate.	25	-
20-10	10 k blue, black, and purple	20	-
20-10A	20-10, imperforate. Stylized rocket and globe, for the first anniversary of Titov's flight, "25 hours in the cosmos" on the globe.	25	-
20-11	1962 ROMANIA, 35 b brown	5	-
20-12	55 b green	10	-
20-13	1.35 l. blue	20	-
20-14	1.75 l. red FDC 7/27/62. Each shows 3 earlier Romanian space stamps, with white outline of a dove superimposed.	25	-
20-15	35 b + 55 b + 1.35 l. + 1.75 l. blue, brown, red, and green, imperforate One each of (20-11)-(20-14) in changed colors, in sheet 3 1/8" x 4 1/4" with white outline of a dove over all.	75	-
20-16	1962 HUNGARY, 4 fo green and silver Rocket and diagram of rocket engine. One of a series on the history of flight from Icarus to the present.	35	-
20-17	1962 COSTA RICA, 30¢ blue Sc C324. Courier I-B, army satellite launched Oct. 4, 1960. The 500-lb. sphere at 501-658 mi. was an active communications satellite able to receive and send signals.	10	-
20-18	30¢ blue overprinted (red) FDC 9/12/62. Ptg 200,000. 20-17 overprinted "II Convencion Filatelica Centroamericana Setiembre 1962."	-	-
20-19	1962 ALBANIA, 0.50 l. purple and yellow-orange Sputnik I in orbit, "11 Tetor 1957".	5	-
20-20	1 l. blue-green, brown, and black Laika and Sputnik II, "3 Nendor 1957".	5	-
20-21	1.50 l. orange-red and orange Lunik I and sun, "2 Janar 1959".	5	-
20-22	20 l. red-violet and blue Lunik III and moon, "7 Tetor 1959".	60	-
20-23	14 l. orange-yellow on blue background Souvenir sheet 3" x 4", rocket in flight, with dates and capsules of flights shown on (20-19)-(20-22).	1.00	-
20-24	0.50 l. imperforate, purple and orange	8	-
20-25	1 l. imperforate, olive green, brown, and black	16	-
20-26	1.50 l. imperforate, red and orange	25	-
20-27	20 l. imperforate, orange and blue	3.20	-
20-28	14 l. imperf. S/sheet, red on blue background Designs as on (20-19)-(20-23).	7.00	-
20-29	1962 UNITED ARAB REPUBLIC (EGYPT), 10 m red and green FDC 9/1/62. Ptg 2,000,000. Al Qahir rocket, eagle, and olive branch.	6	-
20-30	1962 CZECHOSLOVAKIA, 60 h FDC 8/18/62. Astronaut in space ship. Issued in sheets of 10 se-tenant with central coupon with Praga emblem, also alternating in sheet with 30 h.	-	-

20-31	1962 GABON, 85 fr blue and orange FDC 9/4/62. Rocket.	44	-
20-32	10 fr + 20 fr + 60 fr + 85 fr, various colors FDC 9/4/62. Airplanes and rocket. Souvenir sheet of 4 stamps including 20-31, 3 7/8" x 5", inscribed "Exposition Philatelique Libreville Septembre 1962".	1.15	-
20-33	1962 RUSSIA, 10 k black, purple, blue, and red Sputnik among stars. 5th Anniversary Sputnik I.	18	-
20-34	1962 BULGARIA, 5 s green and olive Tsiolkovsky.	8	-
20-35	13 s blue and yellow Sputnik circling moon, for 13th Astronautical Congress.	18	-
21.	<u>M. SCOTT CARPENTER</u>		
	At 8:45 AM, May 24, 1962, Malcolm Scott Carpenter in the "Aurora 7" Mercury capsule was launched from Cape Canaveral into an orbit at 99-167 miles. The 4200-lb. ship ran low on fuel, and the temperature control on his suit malfunctioned. After three orbits, he overshot the landing area by 250 miles and was not heard from for 46 minutes. At 2:25 he was spotted by an airplane on a liferaft, 135 mi NE of Puerto Rico. He was picked up at 4:30 and landed on the USS Intrepid at 5:55.		
21-1	1962 PARAGUAY, 0.15 g blue-gray and buff	3	-
21-2	0.25 g brown-violet and buff	3	-
21-3	0.30 g green-gray and buff	3	-
21-4	0.40 g gray and buff	3	-
21-5	0.50 g violet and buff Mercury capsule over Cape Horn.	3	-
21-6	12.45 g red and brown	65	-
21-7	18.15 g blue-red and brown	1.00	-
21-8	36.00 g red-brown and brown Profiles of Glenn and Carpenter.	1.95	-
22.	<u>TELSTAR I</u>		
	At 4:35 AM EDT, July 10, 1962, a 3-stage Delta lifted the 170-lb. Telstar into orbit at 579-3454 miles, with orbital inclination of 44.7° and 157.8-min. period. The communications satellite, owned by AT & T, contains 1064 transistors, 1464 diodes, and 3600 solar cells, amplifies signals received at 6390 megacycles 10 billion times, and retransmits them on 4170 megacycles. At 7:34 PM, a TV picture of the U.S. flag and the sound of the Star Spangled Banner was transmitted from Andover, Maine, and received in France. On July 11, France broadcast a taped program directly to the U. S. via the 34.5" diameter satellite.		
22-1	1962 FRANCE, 0.25 fr green, gray, and orange FDC 10/1/62. Space Telecommunications Center at Flemer-Bodou, France.	9	-
22-2	0.50 fr blue, dark blue, and green FDC 10/1/62. Telstar, earth, and TV set.	18	-
22-3	1962 ANDORRA, 50¢ blue and violet FDC 9/29/62. Globe and Telstar.	17	-
23.	<u>NIKOLAYEV AND POPOVICH</u>		
	At 4:30 AM EDT, Aug. 11, 1962, Major Andrian Grigoryevich Nikolayev, 32, code name "Falcon", was launched into orbit from Russia. His orbit was at 113-156 mi., with an inclination of 64°59' and a period of 88.5 minutes.		

A radio exchange between Nikolayev and Khrushchev was broadcast on Soviet networks. Live television pictures were broadcast from the capsule to Russian viewers. At 4:02 AM EDT on Aug. 12, Lt. Col. Pavel R. Popovich, 31, code name "Golden Eagle", in the Vostok IV, joined Vostok III in orbit and approached within 3 miles of Nikolayev's spaceship. His orbit at 112-157 miles was almost identical with Nikolayev's, and the two made visual, radio, and TV contact. Nikolayev landed by parachute after 64 orbits, 94 hrs. 25 min., and 1,615,600 miles, at 2:55 AM EDT, Aug. 15, south of Karaganda, Kazakhstan. Popovich landed 6 minutes later, at 3:01, after 48 orbits, 70 hrs. 59 min., and 1,243,000 miles, 125 miles from Nikolayev. The two, reunited, ate watermelon.

23-1	1962 RUSSIA, 4 k blue, red, and brown	11	-
23-1A	23-1, imperforate. FDC 8/15/62. Photo of Nikolayev with rocket and globe, "11-15-VIII, 1962".	11	-
23-2	4 k blue, red, and brown	11	-
23-2A	23-2, imperforate. FDC 8/15/62. Photo of Popovich with rocket and globe, "12-15-VIII, 1962".	11	-
23-3	6 k blue, indigo, yellow, and orange	17	-
23-3A	23-3, imperforate. FDC 8/15/62. Profiles of two cosmonauts, and rocket.	17	-
23-4	1962 ROMANIA, 55 b violet Nikolayev and Vostok III.	13	-
23-5	1.60 l. blue Earth and two capsules in orbit.	34	-
23-6	1.75 l. maroon Popovich and Vostok IV.	37	-
23-7	1962 HUNGARY, 1 fo blue and brown FDC 9/4/62. Ptg 360,000.	15	-
23-7A	23-7, imperforate. FDC 9/4/62. Ptg 15,000. Earth with Vostoks III & IV.	75	-
23-8	2 fo blue and brown FDC 9/4/62. Ptg 360,000.	30	-
23-8A	23-8, imperforate. FDC 9/4/62. Ptg 15,000. Nikolayev and Popovich. Issued se-tenant with 23-7 and 23-7A.	1.50	-
23-9	1962 GERMAN DEMOCRATIC REPUBLIC, 70 pf blue, yellow, red, and green FDC 9/13/62. Imperf. souv. sheet $3\frac{1}{2}$ " x $4\frac{1}{4}$ ", marked "Erster Gruppenflug in Kosmos". Two cosmonauts, portion of globe with orbits.	68	-
23-10	1962 POLAND, 60 g purple and green Nikolayev and Popovich on TV screens.	5	-
23-11	2.50 z green and red Two stars in orbit.	15	-
23-12	10 z black, gray, blue, and red Souv. sheet $1\frac{3}{4}$ " x $3\frac{5}{8}$ ", two stars in orbit.	65	-

IN PROSPECT FOR 1962 - 1963:

INDONESIA, 3 v., space theme	25
UNITED NATIONS, 12/3/62, 4¢ blue (ptg 2,750,000), and 11¢ maroon (ptg 2,500,000), Peaceful Uses of Outer Space	20
MONACO, 1 v. (?), Telstar	95 (?)
MALI, 45 fr and 55 fr, Telstar	-
ST. PIERRE AND MIQUELON, 50 fr, Telstar	-
WALLIS AND FUTUNA ISLANDS, 12 fr, Telstar	-
POLAND, 6 v., Cosmic flight	-

FORBIDDEN IMPORTS: The following stamps are forbidden entry into the United States, and cannot legally be imported. They are listed for historical reference only.

PEOPLE'S REPUBLIC OF CHINA

- 6/25/58 8 f deep gray green. Peking Planetarium.
- 20 f indigo. Planetarium in operation.
- 10/30/58 4 f rose red. Sputnik I and ancient theodolite.
- 8 f bluish violet. Sputnik I in orbit.
- 10 f deep blue-green. Three Sputniks in orbit.
- 9/10/59 8 f scarlet, blue, and black. Moon rocket.
- 4/30/60 8 f scarlet. Lunik II.
- 10 f blue-green. Lunik III.
- Also Gagarin and Titov commemorative sets.

NORTH KOREA

- 3/26/58 10 wn slate blue. Rocket and Sputnik.
- 20 wn slate blue. Sputnik in orbit.
- 40 wn slate blue. Sputnik in orbit.
- 70 wn slate blue. Rocket and Sputnik.
- 5/4/59 2 ch slate, purple, and pale buff. Rocket and moon.
- 10 ch blue and pale green. Rocket and moon.
- 7/15/60 5 ch turquoise and blue. Lunik nearing moon.
- 10 ch yellow, red, black, light blue, and dark blue. Russian flag on moon.
- ? ? ? 10 ch red, yellow, and blue. Rocket nearing moon.
- 1961 10 ch ultramarine and light blue. Gagarin and Vostok I.
- 10 ch reddish violet and light blue. Gagarin and Vostok I.

LABELS AND POSTER STAMPS: These issues were not authorized by any government for postal purposes. They were issued privately for publicity, advertising, or propaganda purposes, and are listed so that they may be recognized as such.

ROMANIANS IN EXILE IN MADRID, 1962, 2 v. perf. and imperf. John Glenn and Mercury capsule. FDC of all 4 varieties sells for \$1.95.

INTEREX 1962 Commemorative Sheet, 4 v., in 2 color varieties, blue and black or yellow and black. Scout, Delta, Juno, and Tiros satellites, each on a "4¢" stamp. 3 7/8" x 4 7/8" overall. Set of 2 sheets, \$1.40.

11th ASDA NATIONAL POSTAGE STAMP SHOW 1962, 2 v. in two color combinations, perf. and imperf. Mercury capsule and interplanetary rocket. Issued in sheets of 10. Set of 8, \$.27; set of 4 sheets, \$1.35.

