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# ≡ SPACE DEBRIS ≡

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by

  
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1. Outer space
2. Orbital debris
3. Debris mitigation

## ≡ Abstract ≡

Space debris has been a problem since the beginning of the space age, when spacecraft were threatened by particles moving at hypervelocities. However, nature is not entirely at fault as Earth's space program itself has created some of the more dangerous debris. Using statistical analysis methods, a comparison was made between the amount of man-made space debris at a future date if nothing is done about the space debris problem, and the amount of man-made space debris at that same date if mitigation procedures are implemented.

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## ≡ EXECUTIVE SUMMARY ≡

Before spacecraft and the space age, the night sky was both useful and beautiful. It hasn't changed, but it has become dangerous to operations that are now carried out in space. An object traveling at extremely high velocities can endanger the physical spacecraft by damaging sensitive parts, such as windows or cables. Or if an object is big enough, it can necessitate a satellite to maneuver off course to avoid being completely destroyed.

To avoid these particles, there have been numerous studies about different types of courses (perhaps less populated orbits), or other types of shielding, to enable a spacecraft to better withstand the typical high-speed impacts.

Spacecraft that have undergone destruction (from insignificant holes to fragmentation) have, however, also caused some of their own space debris. Another type of mission-related orbital debris is operational debris, which occurs as satellites perform their scheduled duties. Rocket bodies, used to launch satellites and then cast off, for example, are considered operational debris.

To protect these spacecraft, there are two mitigation measures that can be taken. The first is actively removing debris that we have created, and the other is to avoid making it in the first place. The first type of mitigation is technologically difficult and not currently feasible budget-wise. The second type still needs to be standardized and implemented, but is very feasible, by just creating spacecraft that are more reliable than they are now.

How much space debris we are causing, and how to mitigate it is under constant study by most of the space programs throughout the world. In this report, there is a study on what the future space environment could possibly resemble in two different cases. The first case is if there is no mitigation at all, and the second if ideal mitigation takes place in 2010. Both are analyzed for the years 2025 and 2050, using statistical analysis.

After complete analysis of both cases, the recommendation is to wait until we have better technology as the space debris environment will not become significantly worse in the next 50 years. The small amount of mitigation we can accomplish with relatively primitive methods should be exchanged for thorough research to enable space programs to make significant contributions against the pollution of outer space.

## ≡ PROBLEM STATEMENT ≡

Space debris is a growing problem and obstacle to operating spacecraft orbiting the Earth. There are two types of objects in Earth's orbit. The first is artificial debris, which is man-made, of debris created in missions through either collisions and explosions, or operational problems (upper stages, lost paint chips etc.) Then there is natural debris, which consist of meteoroids and pieces of comets and asteroids.

The goal of this project is to discover the how our activity affects space missions now, and try to predict how it will affect the future space debris environment. Also, to make a comparison between the effects of space debris to possible future missions if there is no mitigation, and the effects of orbital debris to space missions if a mitigation scheme is implemented.

## ≡ HISTORY OF ORBITAL DEBRIS ≡

The night sky has been of interest to man-kind throughout all of history. Because of the constant relative position of fixed stars and the predictable motion of the planets, the night sky is important for navigation for animals as well as humans.

Unusual objects, such as comets and meteors, have always caused fear, anxiety, and may in modern terminology be called debris.

A comet is a celestial body moving about the sun in a greatly elongated elliptical, or parabolic orbit, and consisting, when near the sun, of a bright star-like nucleus surrounded by a misty light and having a train of light or tail, sometimes of enormous length, and usually directed away from the sun. A comet remains visible from the Earth only for a short time, i.e. while it is in a part of its orbit near the sun. They have at all ages been superstitiously regarded as heralds of strange or disastrous events.

A meteor, in the modern restricted use of the word, is a small massive matter from celestial space rendered luminous by the heat generated by collision with Earth's atmosphere. Not all meteors burn up completely within the atmosphere, and some meteor accidents were recorded during the last century. Meteors of various sizes have been found on the Earth and are on display, for example, in the Smithsonian Museum in Washington D.C. In the 1980's, a team headed by Luis Alvarez developed a theory to explain the extinction of the dinosaurs as the aftermath of a meteor impact.



Comets and meteors are natural space debris. Isaac Newton and Johannes Kepler developed natural tools to predict their appearance. Moreover, velocities and trajectories of objects orbiting the Earth can be calculated.

Since the beginning of the space age there is, in addition to natural debris, also artificial debris. The Space age began when, on October 4, 1957, the Soviet Union launched Sputnik. The satellite stayed in orbit around the Earth until it reentered the atmosphere and burned up. – Sputnik became the first man-made meteor.

Spacecraft are expensive and valuable, and their payload, sometimes consisting of humans, needs to be protected from impact with other orbiting objects. Therefore the problem of space debris has drastically changed since the beginning of the space age. Meteors and comets observable from Earth are not the only dangers to spacecraft. Small particles orbiting the Earth may have enormous velocity, and therefore a large momentum, and may cause severe damage. Spacecraft in Earth's orbit must now maneuver around all other spacecraft as well as natural debris. Nearly half a century after Sputnik, we have more than 2000 operational spacecraft, and millions of fragments of previous spacecraft in Earth's orbit. These fragments range from 10's of nanometers, to dysfunctional spacecraft still completely intact (United Nations, fig. 1 and 2), and they can cause serious trouble for any other spacecraft in the area.

The procedures used to protect spacecraft from debris are mostly prevention [8]. All items in orbit around the Earth are counted, classified, and kept track of.

Operational spacecrafts are given directions for emergency maneuvering and are so designed that dangerous or fragile items will not be hit by debris. Larger items are more easily avoided by evasive actions, but smaller items are not monitored, so they could easily hit spacecraft at any time, causing damage to cables or windows, making replacement necessary.

The International Space Station (ISS) is the most heavily shielded object in space, protected by over 200 shields, collectively referred to as Whipple shields. "Much of the blanket on the ISS is made of Kevlar – the material used to make bulletproof vests [5]."

## ≡ LITERATURE REVIEW ≡

Orbital debris typically refers to artificial space debris, but the term is also used for both natural and artificial debris. This section will discuss different aspects of all types of space debris based on various sources.

### What is Space Debris?

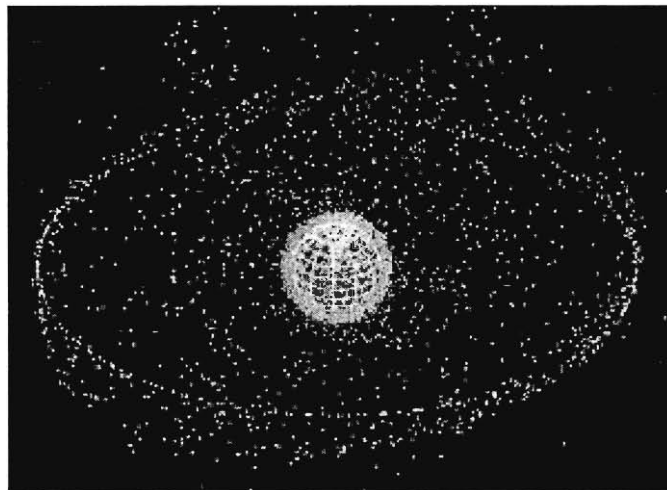
The United Nations (UN) states that there is still “no consensus agreement on the definition” of space debris, but gives the definition from the Scientific and Technical Subcommittee at its thirty-second session:

“Space debris are all manmade objects, including their fragments and parts...in Earth orbit or re-entering the dense layers of the atmosphere that are non-functional with no reasonable expectation of their being able to assume or resume their intended functions or any other functions for which they are or can be authorized. [12]”

Another definition is that orbital debris consists of both man-made debris and micrometeoroids [7,8]. Orbital debris comes in various sizes, densities, positions and shapes, weights, and depending on the size can cause damage sensitive parts of the spacecraft or cause a catastrophic breakup [8].

There are many different orbits around the Earth that satellites ‘reside’ in. There are three “heavily used orbital regions” – Low Earth Orbit (LEO), Sun-Synchronous Orbit, and Geosynchronous Earth Orbit (GEO). LEO is very popular for many reasons – for one thing it takes far less energy, and a smaller launch vehicle, to put a satellite into a lower orbit than into a higher one; another reason is that better (higher resolution) images of the Earth are possible from closer; and also, spacecraft are protected from radiation from the sun by the

Earth's magnetic field [18]. LEO is defined to be any orbit with an altitude less than 2,000km [2, 8, 18]. Sun-synchronous orbits "process around the Earth at the same rate that the Sun moves about the earth or the Earth [39]" which is useful to keep the satellite in the same lighting at all time. These orbits can exist in various altitudes, but they are mostly in LEO [18]. Finally, GEO is any orbit which keeps roughly the same position above the Earth at all times. Geostationary orbits are a type of GEO, which have a 0 inclination above the Earth. Communication satellites use mostly GEO, which has on the order of a 36,000km altitude.



**Figure 2** - Space debris population – note the wide ring<sup>1</sup>(GEO) and the cloud immediately above the earth (LEO)

No orbit is perfectly circular. GEO is fairly circular compared to orbits in LEO, which tend to be much more elliptical. For elliptical orbits, there are two critical points, the apogee, and the perigee, the former being the point at which the

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<sup>1</sup> Source: <http://www.fhr.fgan.de/fhr/rwa/envir.gif>

object is farthest from the surface of the Earth, and the latter being the point at which the object is closest to the surface of the Earth [18, 32].

The number describing the amount of orbital debris depends on how the objects are counted. There have been approximately 3,700 launchings since 1957 [18] – one every four days [13]. Most estimates are based on a range of sizes or in what orbit the debris is in. Debris can range in size from microscopic to entire upper stages and all items over 10cm are tracked [2, 3, 7, 13]. However, those items are only tracked in LEO [2]. In higher orbits, we can track only larger things until in GEO, “not even all objects with a diameter greater than 1 meter are tracked [18].” Those tracked objects number 10,000 in LEO [2, 14]. Some discrepancy is present when source 13 says that there are 8,000 objects being tracked, and source 8 says there are 6,000 of those in LEO. There are also estimates available, for how many objects smaller than 10cm are in LEO. As the size of the debris goes down, the number of objects there are of that size increases. There are on the order of 100,000 objects between 1cm and 10 cm in size [2, 8, 14, 38]. Over a billion objects exist in LEO that are between 1mm and 1cm [8]. The difference between being tracked and being observed, is that an object big enough to cause catastrophic damage is watched and kept track of, whereas, objects smaller than 10cm are just counted for modeling and estimation purposes.

Inclination is an angular measurement of an object with respect to the equatorial plane [18]. “In general, objects with larger optical or radar cross

sections (RCS) are more easily detectable than objects with smaller cross sections. Both the optical and RCSs of particular space objects can vary greatly, which is not surprising for a collection of irregular-shaped objects [18].” So, whether an object is trackable or not depends highly on its orientation and inclination with respect to the plane of the Earth’s equator.

Regardless of where the objects are, however, they are not always evenly distributed. There are regions of concentrations, most notably in LEO, where in bands around 800, 1,000 and 1,500km, there is significantly more debris than other areas of LEO [2]. Between 900 and 1,000km altitude, there are a large number of “relatively smooth and spherical shapes, rather than the irregular shapes that would typically be created in a breakup [18].” “The Soviet Union used to launch nuclear powered satellites...but once their function was finished, the payload is separated from the power supply, which was a nuclear powered power supply...somehow, there was a design flaw in the nuclear powered module. The nuclear power core was cooled by liquid sodium and potassium, and so, somehow when they put it up at that altitude, the liquid coolant, sodium and potassium, ...leaked out [39].” Although many facts seem to point towards these tens of thousands of spheres being from the leak from the Soviet Union’s Russian Radar Ocean Reconnaissance, it has not been proven without a doubt [18, 25, 26, 39]. However, no matter what the makeup of these particles is, there is still a region of concentration somewhere between 800 to 1,000km [25, 26], where the density of debris is much higher than the rest of LEO.

Debris can be identified by velocity as well. On average, the speed of a debris particle is somewhere between 5m/s and 15m/s [1, 2, 3, 5, 6, 7, 8, 13, 18, 39]. At impact however, velocities at impact – that is, during a collision – can vary anywhere between 0 km, whereas when the two objects have a head-on collision, the velocity at impact can reach almost twice the orbital velocity, which in LEO, is approximately 7 or 8km/s, and in GEO, is about 3km/s. Overall, in LEO, objects are moving at hypervelocity, and so spacecraft must be “designed to withstand...impacts with these particles [6].” Hypervelocity is the “relative velocity of two objects that, in general, exceeds the speed of sound in solid materials (about 5km/s) and results in an impact response that is not dominated by material strength effects [18].”

*Observation: If the orbit is at a higher altitude, the velocity of the object is smaller. This is due to the fact that gravity has less force farther away, and therefore, to stay in any orbit farther away, requires less speed.*

### Potential Hazards due to Orbital Debris

Orbital debris, both man-made and natural, present hazards to operating spacecraft. Functional spacecraft make up only 6 percent of just the man-made material in space [18]. This percentage is even less when natural debris is included in the calculation.

There is only one known collision between an operating spacecraft and a piece of man-made debris. In 1996 the French CERISE spacecraft was struck by an object that originated from an exploded upper stage Ariane [8, 12, 39]. The

stabilization boom was struck which would have proven catastrophic to the spacecraft had it not been "built with so much redundancy that...the French space agency...was able to reacquire control of the satellite, and continue to make it useful even though it had a shorter boom [39]."

Any kind of debris can cause two different types of problems. It can cause holes, which could cause catastrophic damage (cascading, or fragmentation) or it could negatively effect operations [12, 39]. The CERIS, for example, experienced damage to the spacecraft, but reacquired orbital stability.

The impact theory is a model of debris based on damage that it can cause to the physical spacecraft. Bjork's equation is:

$$P = 1.09\sqrt[3]{MV}$$

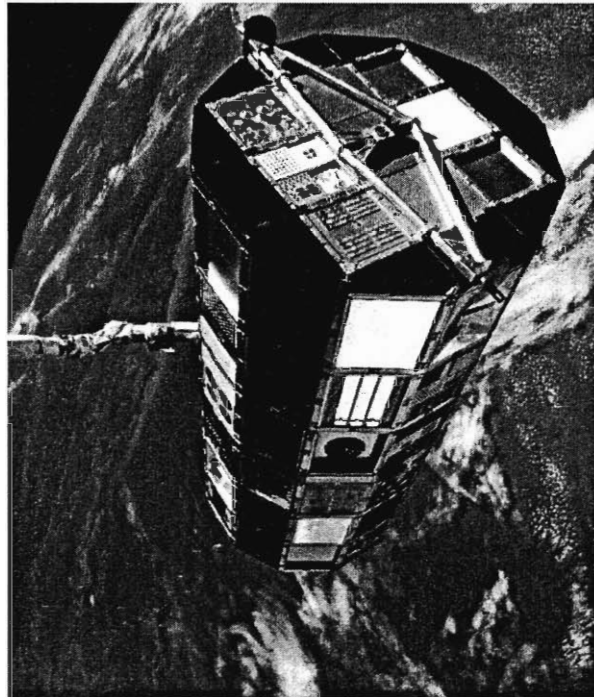
where M is the mass of the projectile in grams,  
V is the impact velocity in km/s  
and P is the penetration depth in cm.

The constant 1.09 is the constant for an aluminum-aluminum collision, and the equation describes the type of hole that would be caused by a collision in space [17]. "A 10 gram (centimeter-sized) particle traveling 10km/s may penetrate a 5cm thick aluminum plate, which is, of course, many times the thickness of current spacecraft walls [17]."

The Long Duration Exposure Facility (LDEF), which can be seen in Figure 2, was a spacecraft designed purely to test shielding for future spacecraft. It was deployed in orbit April 1984 by the Shuttle Challenger [6, 18, 39] "and it had on all its sides and top and bottom, various types of sensing material to make



measurements of debris size and so on and so forth. And it was designed such that...all the debris coming in [from a] direction...would always hit the same surface [39].” Upon its return to Earth, there were 30,000 recorded impacts on the surface of the LDEF [5].



**Figure 3** – The LDEF. <sup>2</sup>

“Spacecraft are more likely to collide with smaller debris than with larger objects. In LEO, the probability of collision with debris in each size range is believed typically to increase by more than a factor of 100 for every factor of 10 decrease in size over most of the medium to small debris size ranges [18].” However, a smaller sized debris piece will not cause as much damage to a

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<sup>2</sup> Source: <http://setas-www.larc.nasa.gov/LDEF/index.html>

spacecraft as a larger piece of debris. A 10cm object can cause catastrophic damage at impact, meaning fragmentation or cascading [8].

Fragmentation occurs when an operational spacecraft collides with another object and the collision result in a breakup generating multiple pieces of debris. A single collision could lead to more than a million pieces of debris, with diameters more than 1mm [17]. Fragmentations can be caused by a number of other things as well.

“Breakups are typically destructive events that generate numerous smaller objects with a wide range of initial velocities. Breakups may be accidental (e.g., due to a propulsion system malfunction) or the result of intentional actions (e.g., space weapons tests). They may be caused by internal explosions or by an unplanned or deliberate collision with another orbiting object [18].”

Fragmentations, in addition to harming the spacecraft, increase the debris environment in the process [8]. The more pieces originate in a breakup, the more new pieces of debris there are in that orbit. After a test of a Navy satellite in a Tennessee bunker, with an “plum-sized aluminum ball traveling at a speed of about [6.4km/s],” it was “impossible to tell what the metal fragments might once have formed [13].”

Cascading is a phenomenon that occurs when an object collides with another object and one of them fragments. The first object

“breaks up into hundreds of pieces, and these hundreds of pieces now have increased the threat against other [objects] that are in orbit too, and they hit them, and cause chain reactions...We have nowhere near the density of debris to cause that kind of problem – even in the region of 850 to 950 km. But it is a potential concern [39].”

Operational problems can either be human related, or function related.

In human related missions, special precautions are taken to ensure that

the crew is protected from debris. The space shuttle flies in the “best possible orientation [5]” with its “tail pointed in the direction of the velocity vector [12].” Functional related issues include things such as loss of altitudal stability.

Another effect of space debris is not necessarily immediately harmful. Space debris, and operating satellites alike can be seen from Earth. For casual observers of the sky, “some [satellites] are very bright, [and] some have unusual or otherwise interesting visual characteristics [9].” However, to astronomers, debris can cloud fields of view, which can be important during wide field imaging [12].

In order to avoid potential breakups, NASA, specifically the Jet Propulsion Laboratory (JPL) has a series of “preferred reliability practices, one of which suggests designing “spacecraft external surfaces to ensure 95 percent probability of no mission-critical failures from particle impact [4].”

## Models of Debris

To make any calculation concerning orbital debris, a model needs to be in place, as we would have no basis for our conclusions. There are models for essentially every kind of debris incident that can happen. “It is very difficult to gather data from the rare impacts of...debris in space, assessment of...damage such debris can cause...is accomplished primarily through experimental testing and analytic...methods [18].”

“Some damage is expected and acceptable on space missions [5],” but as “space debris [still] poses a real threat to space vehicles...NASA recently requested impact models [1].” Smooth Particle Hydrodynamics (SPH) is a technique to predict the distribution of debris in a fragmentation situation, without “the normal computational mesh [1].” More generally, a prediction can be made about debris distribution in a breakup, using numerical simulations with computer codes, often referred to as ‘hydrocodes [18].’ However, computer simulations are only as accurate as the parameters they are given, and “often...experimental data are not available,” and they are also limited by “the memory and speed of available computers [18].” The most recent model, the ORDEM2000 was released earlier this year. The model “has been subjected to a significant verification and validation effort...[and] has been tested thoroughly and compared with all available [11].”

Physical models are often used as well, to test the effect of hypervelocity impacts on shields, windows, etc. and to test the effects of explosive fragmentations [12]. Sizes and shapes vary as much as possible, and test velocities are used that would normally be found in an orbit ( $\sim 10\text{-}15\text{km/s}$  in LEO, and  $\sim 3\text{-}5\text{km/s}$  in GEO) [18]. “Spacecraft must be designed to withstand hypervelocity impacts by untrackable particles [7].” To test some of the components for the International Space Station (ISS), they were even tested with the Russian Mir Complex [10].

Other models estimate the population of debris that there is in Earth orbit. NASA is constantly updating its models for the amount of debris, in LEO, specifically [8]. They can be either long-term or short-term models – long-term being up to 100 years from the current, and short-term to “predict’ the current environment [12]” (for spacecraft entering space in the near future). ORDEM2000 is a short-term model, used extensively for the “Space Station, and the ISS design and operations [12].” EVOLVE is chiefly a long-term model, which calculates an evolution of the orbital environment based on what objects are in what orbits. Results from EVOLVE have one drawback, and that is that it is drawn from other models like breakup models [29].

## **Debris Mitigation**

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Since debris is an ever-growing problem, regulation needs to be implemented for some improvement of extraterrestrial world. There are two types of debris mitigation procedures. One method is to impede the problem from getting worse in the future and the other is to decrease the amount of debris that is there already.

NASA is currently cataloging all objects in LEO that are greater than 10cm, and all objects in GEO that have a diameter larger than 1m. This catalogue helps prevent spacecraft from collisions by keeping spacecraft up-to-date about the presence of objects that could be threatening. It also includes information about the “period, inclination, apogee, and perigee...generally along with information

on the object's origin – only objects with known origins are entered into the catalog – and its radar or optical cross section [18].”

However, besides cataloging, there are three techniques for improving the current debris environment. The most constant one is the natural decay process. It is a “slow process [39]” but a sure one, in which the atmosphere drags down material from orbit, and then reduces the object to ashes. In orbits of less than 600km in altitude, this process could take several years, but orbits higher than 800km, it could take centuries to decay.

Extreme physical models are deliberate destructions, to “obtain a broad picture about how long space debris would stay in orbit [14]. There is mission category dedicated to such intentional breakups called the “Technology Missions [19].”

However, it is the opinion of many environmentally-concerned people, that “unlike Earth, space certainly can't heal itself, or naturally recover from man-made wounds. We caused it, we must cure it [15].”

### **1. Removing current debris**

One considered method for removal of existing debris has been to place a large ‘net’ into space, and collect all extraneous particles, but a net would have to have incredible strength to withstand particles coming in at 10km/s [39]. In the same category, a spacecraft could theoretically be designed, and be devoted solely to the purpose of removing large objects from orbit. “All indications are that the cost of such a vehicle would be prohibitive, especially when the small

reduction in the debris hazard that it could achieve is considered [18].” For smaller debris, “debris sweepers’ (large foam balls...that impact with smaller debris)” could conceivably be designed, but would be “technically difficult, demonstrably inefficient, hazardous to functional spacecraft, and risks producing more small objects than it eliminates [18].”

Another mitigation idea was to have a powerful laser on Earth to blow the pieces of debris into smaller pieces. This technique, however, would not be efficient, as it is just *increasing* the amount of debris that is present in space, and “if you increase the risk 100 fold, you have not succeeded [39].” A branch off of this suggestion is to use some laser and in essence vaporize smaller debris. The Orbital Debris Removal Using Ground-Based Sensors and Lasers (ORION) Project showed that this procedure would eliminate essentially all debris below the altitude of 800km of sizes between 1cm and 10cm, over a fairly short time span (2 to 3 years) but for a significant cost [38]. However, the powerful lasers needed are not nearly invented yet [39].

## **2. Constraining future debris**

Currently because so many interests (political, economic, military and scientific) “interest in clear orbits...there is a much more powerful incentive for the space industry to clean up space, and keep it clean [15].” ‘Keeping it clean’ has long been a debate topic for international standardization. “The problem is, there is no legal requirement. It is by international consensus that this kind of thing is evolving [39].”

All man-made debris falls into two distinct categories – mission related debris and fragmentation debris. Mission related debris is any debris created by intentional ejection of some object into space. “These objects normally perform no useful service after release and are sometimes referred to as ‘operational debris.’ ... Debris from ... breakups are not considered mission-related objects [18].” This type of debris can range from paint chips to entire rocket-booster stages [1].

To attempt to prevent such mission related debris, from occurring, standards specify that “programs and projects will assess and limit the amount of debris released in a planned manner during normal operations [36].” This would mean, for example, the difference between ejecting a telescope cover after removing it, and keep it attached to the satellite, without letting it interfere with the optical path of the telescope [39]. Currently however, the cost for redesigning systems to implement these mitigation measures is high, and some commercial companies would prefer more revenue to keeping up with relatively vague standards [12, 39].

“Fragmentation debris – the single largest element of the cataloged Earth-orbiting space object population – consists of space objects created during breakups and the products of deterioration [18].” It is especially dangerous, as the number of debris produced is so immense that it significantly increases probability of a satellite collision, “possibly triggering a vicious spiral of debris generation [17].”



Standardizing mitigation practices for fragmentation debris is much harder than it is for mission related debris, because of the unpredictability of fragmentation. From size, shielding information and debris population, the probability of no penetration (PNP) can be calculated. The PNP is gives the probability that the object will not be penetrated catastrophically within the next decade. In the case of the ISS, "the overall goal...is a PNP of 0.81, which is a 19 percent chance that the station will be penetrated by orbital debris at least once in its first ten years [8]." It achieves this goal by being the "most heavily shielded spacecraft ever flown [2, 7]." Shielded with more than 200 shields, as a group called 'Whipple shields [8, 39]' "it would take a fairly large object to make it through the shield...through the wall, and into the actual spacecraft [5]."

A major portion of fragmentation debris is due to rocket bodies and other objects exploding because of extra fuel [39]. This depletion of fuel is referred to as 'incapacitation' or 'passivation' of a rocket body. To "reduce potential for explosion," there are two methods available: "either (1) depletion burns after the rocket body separates from the spacecraft or (2) venting of residual propellant [18]." The other possibility for solving this type of problem is to completely use all the fuel, and at the end of the useful life of the spacecraft thrust the spacecraft out of orbit and into a less populated orbit. However, this uses a lot of fuel, "and not enough people have invested in moving their nearly dead satellites out of the geostationary band...and a lot of companies do the right things, but it is a very slow process [39]."

## ≡ Methodology ≡

In order to be able to make legitimate predictions about the future space debris environment, we need to understand the variables involved in calculations, and the assumptions needed to create a boundary around the problem.

### Assumptions

The first assumption is that natural debris is constant. Although man-made debris does technically affect the amount of natural debris through inevitable collisions that occur between the two types of debris, which increase the number of natural debris pieces. We assume that this increase is insignificant, and all calculations will be done with the risks posed by natural debris set to zero. Special note must be made that for an absolute risk assessment, natural debris factors must be accounted for as well.

Mitigation effects will be completely ideal as well. The assumption is that mitigation efforts will be undergone by every spacecraft, and works without fail. The mitigation procedures will be the same as those outlined by the U.S. Government. Practically, however, divergences from this rule will not be uncommon. An international agreement, may not occur as easily, and if it does, it may not be based on U.S. standards. Also some spacecraft may not complete their mitigation maneuvers due to design flaws or other operational problems.

The important assumption that the rate of launches will remain the same, although not necessarily constant, will be made. Assuming that there will be no

change to how many spacecraft are sent into space may not be completely accurate, as while we become more acquainted with the realm of space, we will most likely increase these launchings due increased scientific and public interest, such as tourism or extensive explorations of other planets.

The final assumption is that the all numbers found are accurate and complete. We are relying on the fact that launch and fragmentation data is correct, as that data is the basis for all calculations. In reality, it is difficult for all data to be precise, and in its entirety, as it stems from sources from all around the globe, and the difficulty arises when trying to achieve uniformity throughout all of these sources.

## **Data and Matching**

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Data will include two types. Launching data and fragmentation data. Launching data will be dates of any launching that ever took place, successful or not. Even if a launch was not successful, the fact that they occurred is important for discovering the rate at which launches occur. Fragmentation data consists of information concerning which satellites fragmented, how much debris was created in the process, and how much debris remained in orbit after a given amount of time (until the date the source was created).

The data that is collected needs to first be entered and plotted. From these plots, there are different methods that can be used to create a function that matches that data. These functions do not have to be the only functions that match the data, as they are only estimations. With the amount of factors

involved, functions that matched the data set completely, for all values of time would be incredibly complex as well as impossible to find, as is the case with most human activity, as circumstance is not based around a set of rules and cannot be predicted.

Using the curves found with the data matching, a prediction can be made for any year in the future, specifically 2025 and 2050, by taking the value of the function at that point. Therefore, we can discover how many launchings we will make for those two years, and of those launchings how many will fragment, create debris, and of that debris, how much will remain.

Then a representation of the outcome of the mitigation scheme must be found and used to find out how the environment after mitigation plans have been implemented compares to the environment if no mitigation takes place. Function matching must be used here as well.

## ≡ DATA AND ANALYSIS ≡

To offer a prediction for the future of the space debris environment, we will look at the number of launches made every year, the number of fragmentations by launch date, and the percentage of fragmentations per launch date. This data is seen in Table 1.

**Table 1** - Data of launchings and fragmentations by launch date

Year	Number of Launchings per year <sup>3</sup>	Number of Fragmentations per Launch Date <sup>4</sup>	Percentage of Fragmentations by Launch Date	Number of debris objects created by breakup
1957	3	0	0	0
1958	28	0	0	0
1959	25	0	0	0
1960	38	0	0	0
1961	49	1	2.04	296
1962	81	1	1.23	24
1963	70	3	4.28	167
1964	101	4	3.96	103
1965	125	11	8.80	864
1966	135	10	7.40	321
1967	139	7	5.03	70
1968	131	8	6.10	296
1969	127	4	3.14	340
1970	124	7	5.64	531
1971	135	11	8.14	142
1972	106	3	2.83	237
1973	117	5	4.27	451
1974	113	4	3.53	231
1975	132	5	3.78	587
1976	132	12	9.09	718
1977	130	9	6.92	399
1978	128	11	8.59	290
1979	100	10	10.0	342
1980	109	9	8.25	196
1981	126	16	12.69	453
1982	129	9	6.97	419
1983	129	14	10.85	308
1984	129	8	6.20	114
1985	125	15	12.0	141
1986	100	11	11.0	899
1987	114	9	7.89	453
1988	121	6	4.96	90
1989	102	14	13.72	150
1990	121	9	7.44	172
1991	91	10	10.99	137
1992	97	5	5.15	239
1993	83	7	8.43	33
1994	93	5	5.38	708
1995	80	7	8.75	64
1996	77	2	2.60	3

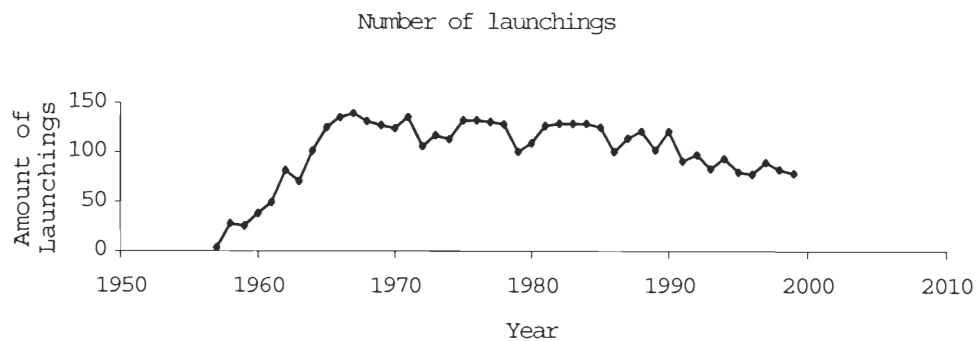
<sup>3</sup> Source: History Of On-Orbit Satellite Fragmentations [43]

<sup>4</sup> Source: Launch Logs [cite]. See Appendix D.

1997	89	4	4.50	11
1998	82	1	1.22	1
1999	78	2	2.56	294
2000	85	0	0	0
2001	59	0	0	0
2002	16	0	0	0
	Total: 4,504	Total: 289	Average: 5.96	Total: 11,294

## Calculations

The data from the years 2000-2002 is superfluous, as a comparison between launchings and fragmentations is impossible due to the unavailable fragmentation data. In Figure 4, the number of launchings is graphed per year. The numbers seem to rise in the initial excitement of having a space program, and then fall into a steady decline until hitting a natural limit between about 70 and 80 launchings a year. This limit is probably defined by budget, design capabilities, design time, etc.



**Figure 4** – Number of launches per year.

The solution to the ordinary differential equation:

$$\frac{d^2 y(t)}{dt^2} + 2\alpha \frac{dy(t)}{dt} + \omega^2 y(t) = f(t)$$

is

$$y(t) = A_1 e^{-s_1 t} + A_2 e^{-s_2 t} + C \quad \text{where} \quad \begin{cases} s_1 = -\alpha - \sqrt{\alpha^2 - \omega^2} \\ s_2 = -\alpha + \sqrt{\alpha^2 - \omega^2} \end{cases}$$

For the type of behavior, described above, this solution would have  $s_1$  and  $s_2$  be real. To simplify initial calculations, the year 1950 was mapped to zero, and the equation was rewritten as:

$$y(t) = A_1 x_1^{\frac{(t-1950)}{10}} + A_2 x_2^{\frac{(t-1950)}{10}} + C \quad \text{where} \quad \begin{cases} x_1 = e^{-10s_1} \\ x_2 = e^{-10s_2} \end{cases} .$$

A least squares fit to the launch data is possible, and using the program in Appendix C written to efficiently find the best fit, the five coefficients become:

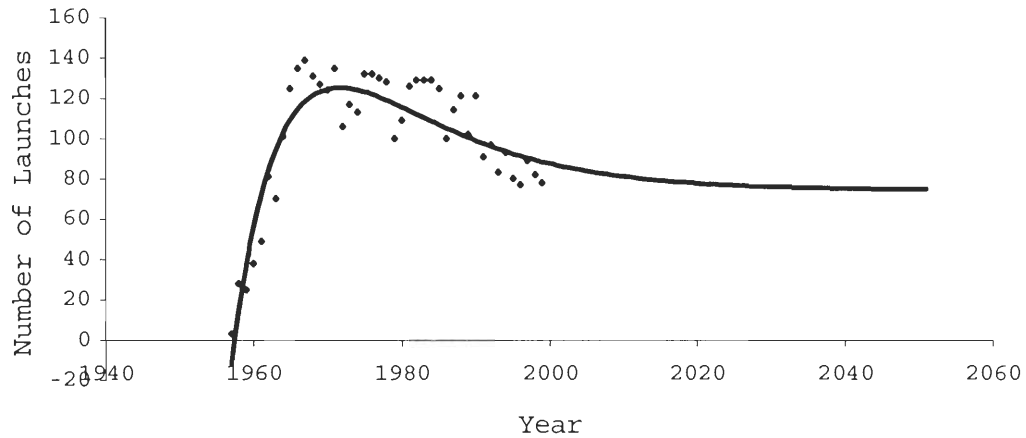
$$\begin{aligned} A_1 &= 814.547 \\ x_1 &= 0.458 \\ A_2 &= -1268.0 . \\ x_2 &= 0.314 \\ C &= 74.423 \end{aligned}$$

So our complete function is:

$$y(t) = 813.54 * 0.458^{\frac{(t-1950)}{10}} - 1268 * 0.314^{\frac{(t-1950)}{10}} + 74.423 .$$

The graph of this function and the original data points is shown in Figure 5.

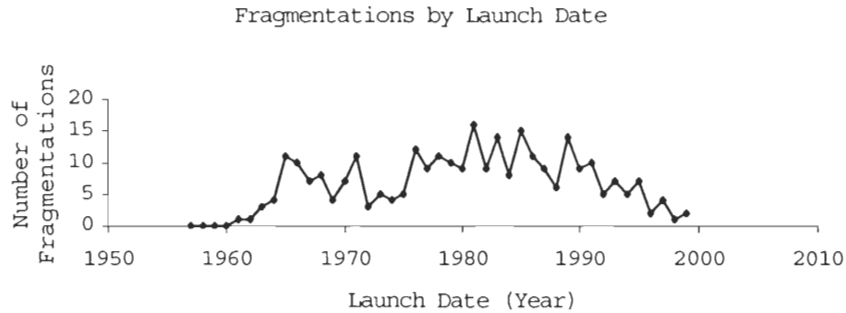
### Data and Matching Function for Number of Launches



**Figure 5** - Original launch data with matching function.

Each time a launch occurs, there is a risk of fragmentation, due to collisions, operational disorders, or even unknown causes. For a given number of launches per year, there have been a certain number of fragmentations of satellites launched that year, although this does not necessarily mean that the fragmentation occurred the year of launching. Since the fragmentation data is based on launch date, and not date of fragmentation, data past approximately the year 1995 is not completely accurate based on the fact that many things launched between then and now are still in orbit, and may therefore still fragment. A graph displaying the number of fragmentations per launch date is shown in Figure 6.





**Figure 6** - Fragmentations based on launch date

Based on the fact that the number of fragmentations decrease much more in the graph than in reality, we can assume that the numbers will continue to increase. This seemingly rash assumption can be justified in that the more objects we launch, the more chance there is of failure due to collision or other malfunction. For a rough matching to this data, a logarithmic plot can be used. The function will follow the form of:

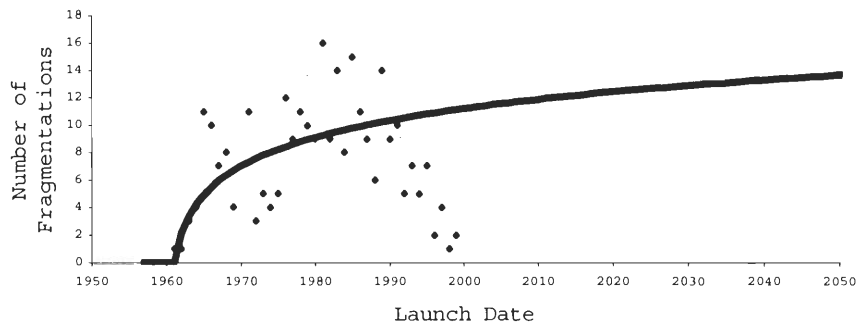
$$f(x) = a \ln(x - c).$$

The constant  $c$  is 1960, as we have no positive values before 1961. The value of  $a$  was computed by knowing where the approximate break-off on the logarithmic curve would be. Taking this break-off point to be at around 1970, and knowing the value of the function to be 7 there, we find that:

$$a \ln(1970 - 1960) = 7 \rightarrow a = 3.040.$$

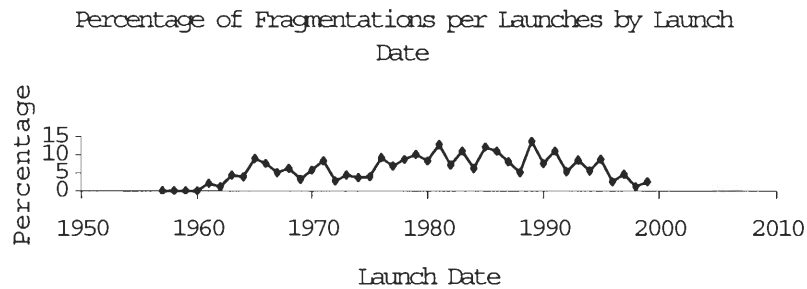
The results of that function with the original data are shown in Figure 7.

Data and Function Matching for Number of Fragmentations



**Figure 7** – Logarithmic matching for fragmentation data by launch date.

The percentage between these two numbers is important for knowing the amount of fragmentations that occur for a given amount of launchings. The percentage of fragmentations varies as shown in Figure 8. This curve looks fairly similar to the curve for the actual fragmentations per launch date, so the same type of curve should match this curve as well.



**Figure 8** - Percentage of Fragmentations per Launch Date

Using the same technique for this curve as for the last one, we find  $a$  in

$$f(x) = a \ln(x - 1960)$$

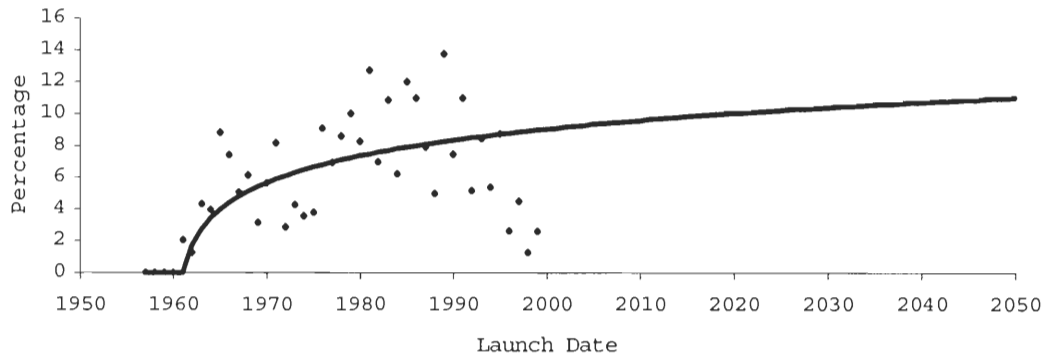
using the value of 5.645 at 1970:

$$5.645 = a \ln(1970 - 1960) \rightarrow a = 2.452$$

$$\text{giving us : } f(x) = 2.452 * \ln(x - 1960)$$

This function can be seen with the percentage data in Figure 9.

### Data and Function Matching for Fragmentation Percentage

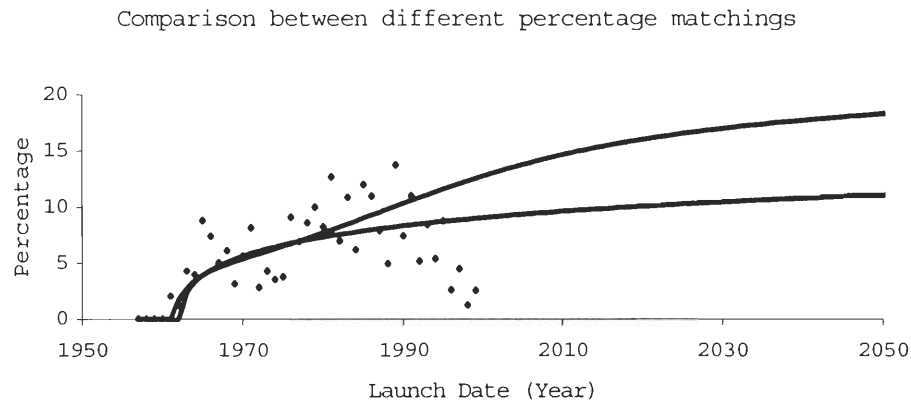


**Figure 9** - Logarithmic matching of fragmentation percentage data.

To compare this logarithmic matching to the matchings we obtained for the raw launch and fragmentation data we find the percentage between those two functions:

$$f(t) = \left[ \frac{3.04 \ln(t - 1960)}{813.54 * 0.458 \frac{(t-1950)}{10} - 1268 * 0.314 \frac{(t-1950)}{10} + 74.423} \right] * 100$$

The graph showing the comparison between the two methods of evaluating the percentages is shown in Figure 10.



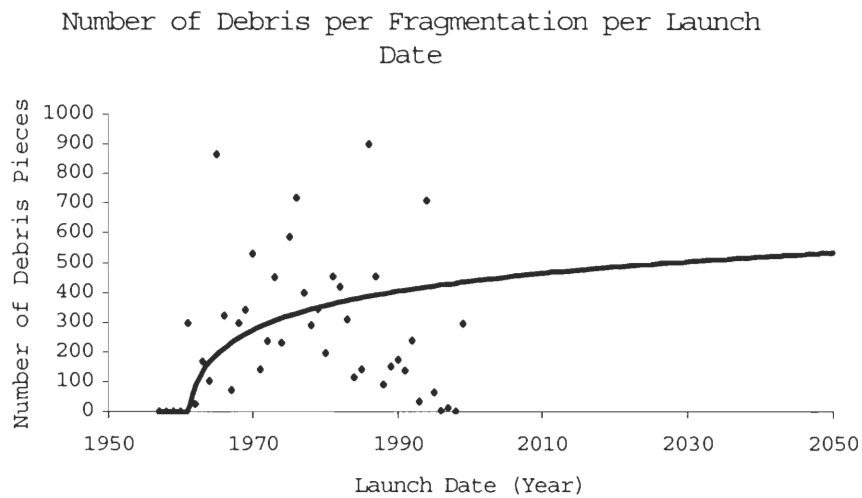
**Figure 10** - Comparison between data matching for percentage of fragmentations per launch date

The similarities can be noted for the beginnings of the functions, but they begin to diverge between the years 1980 and 1982, and then the logarithmic matching is the more optimistic of the two.

## Predictions

The data matchings described in the previous section make it possible to predict the future fairly reasonably. To predict the number of launches in 2025, we take the value of the function at that point, and find that there may be 76.626 launches that year. As the number of launches needs to be an integer, this number can safely be rounded to 77. In 2050, there may be  $74.756 \approx 75$  launches. Of the 77 launches in 2025, there could be  $12.69 \approx 13$  fragmentations and in 2050, maybe  $13.68 \approx 14$  fragmentations. On average, each fragmentation creates 39 pieces of debris, so those 13 fragmentations in 2025 could generate 377 pieces of debris and in 2050, the 14 fragmentations could generate 406 pieces of debris.

As a test of the data matching curve for the fragmentation data, we take the average number of debris objects per fragmentation (36), multiply that by the function ( $y(x) = 3.04 \ln(x - 1960)$ ), add up all discrete values from 1960 to 1999, and compare that sum to the sum of the real data. For the real data, the total number of debris pieces from fragmentations between 1960 and 1999 was 11,294. Adding up the values gained from the function, the total is 12,642. The error is 10.1%. In Figure 11, we can see the number of fragments a year along with  $f(t) = 118.6 \ln(t - 1960)$ .



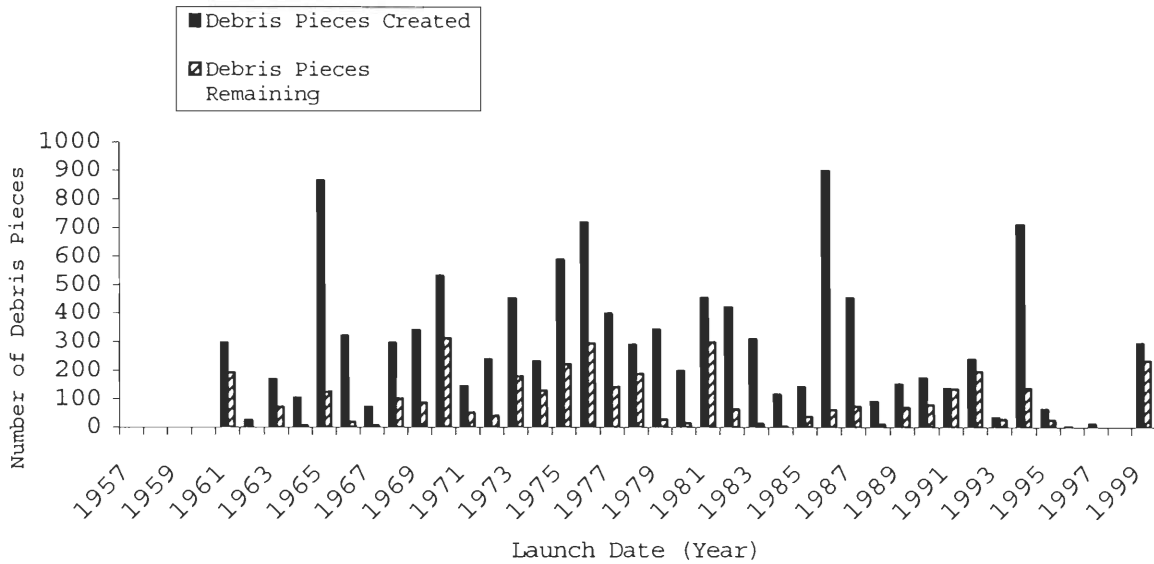
**Figure 11** – Number of pieces of debris created per launch date

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## Estimations

Of these 11,294 pieces of debris, 3,644 of them were still in orbit in 1999. Figure 12 shows how many of the original debris pieces created during fragmentation each launch year remained in orbit in 1999. The still-left-over debris consists of only 30% of the original debris, and will definitely decrease more in time, due mostly to atmospheric drag.

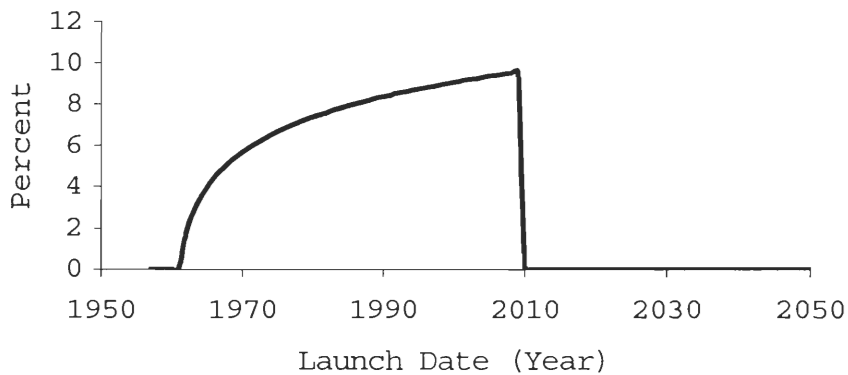
### Debris Pieces Created and Remaining per Launch Date



**Figure 12** - Relationship between created and remaining debris per launch date

Ideal mitigation is when independently of how many launches there are, there is no increase in space debris from those missions. If the Earth were to start mitigating (ideally) in 2010, using the guidelines written by the U.S. government, the result would be similar to the graph shown in Figure 13.

### Percent of Satellite Fragmentations per Launch Date with Mitigation



**Figure 13** - Percent of fragmentations per launch date if ideal mitigation began in 2010

**Table 2** - Comparison between number of debris pieces created with mitigation or without it.

	2002	2025	2050
With no mitigation procedure	13963	24819	37720
With mitigation procedure (starting in 2010)	-	17604	17604

Table 2 displays the number of fragments that would be created altogether (since 1957) with mitigation, and without it. However, these numbers are independent of atmospheric drag, and therefore are pessimistic for the case where there is no mitigation procedure. On the other hand, the numbers for the case with mitigation are slightly optimistic, as they apply strictly to ideal mitigation, and do not include the possibility of failure.

If there was no mitigation at all, then there would be 25,078 pieces of debris due to fragmentations created between the years 1999 to 2050. If mitigation started in 2010, then this number would be cut down to 4,497 which is approximately 80% less. However, those 20,580 pieces that would otherwise be accumulated without mitigation between 2010 and 2050 may not make a large difference when considering the enormity of space.

## ≡ BIBLIOGRAPHY ≡

1. Jones, Roger. "Space Debris." Aug 18, 1995. Last accessed: May 10, 2002. <[http://www-xdiv.lanl.gov/XCM/neural/xwindows/space\\_debris.html](http://www-xdiv.lanl.gov/XCM/neural/xwindows/space_debris.html)>

This source gives us initial facts and basic information about Space Debris. 3,000 of the 30,000 objects launched since the beginning of the space age have exploded creating Space Debris. The dangers include damage to space shuttles. NASA must replace windows due to small debris, and emergency maneuvers must be used to evade larger debris. NASA is looking for a model to predict the expected damage from various types of debris. A group [LANL] uses Smooth Particle Hydrodynamics (SPH) as a method of modeling Space Debris. The theory is that it is a better calculation than mesh techniques. They have tested shields with up to 30km/s.

2. Johnson, Nicholas. "Orbital-Debris Model." April 30, 2002. Last accessed: May 10, 2002 <<http://sn-callisto.jsc.nasa.gov/faq/faq.html>>

This site answers several (22) basic questions about Orbital Debris, for example:

1. *What is Orbital Debris*
2. *Is re-entering debris a risk to people and property on Earth?*
3. *What can be done about orbital debris?*
4. *What is the U.S. policy on orbital debris?*
5. *How do U.S. Government agencies handle orbital debris issues?*
6. *Is there an international treaty on orbital debris? etc.*

3. Goldstein, R. M. "Summary of Goldstone Orbital Debris Observations: October 1996 to May 1997." TMO Progress Report 42-133 (May 15, 1998)

*"Several times per year, on a limited basis, the Goldstone X-band (8.51-GHz) radar is used to monitor the overhead flux of orbiting debris. Data from this sensitive radar, which can detect a 3-mm fragment at a distance of 1000 km, are integrated into a debris model by a team at Johnson Space Center. The Goldstone data fill a niche in the coverage by the Haystack radar and a number of other radars, which also participate in limited observation campaigns.*

*In this article, we summarize the results of 10 nights of operation of the Goldstone radar, from October 1996 to May 1997. Altogether, 70 hours of data have been collected, with the radar beam aimed close to the zenith. During these times, over 2300 debris detection events were observed."* (Summary straight from paper)

4. NASA. "Meteoroids and Space Debris." NASA: Preferred Reliability Practices PD-EC-1102.

This is a proposal to design the external surfaces of a space-craft to ensure 95% probability of no mission-critical failures from particle impact. Considered are mean velocity, mass density/distribution of impacting particles in terms of integral fluence (fluence represents expected number of impacting particles per unit area above several mass thresholds for the mission). A lot of mathematics (probability) is used in the technical rational and examples of noncompliance are given in the *Impact of Nonpractice* i.e. the possibility of serious failure is illustrated by the scenario by the Galileo spacecraft. Tables for this example, for trajectories near Jupiter, are provided as well. A graph showing an almost linear relationship between particle mass and impact speed is also included.



5. NASA. "Caution: Falling Debris." Human Exploration and Development of Space Enterprise. Published: November 15, 2001 <[www.NASAexplores.com](http://www.NASAexplores.com)>

This article shows how dangerous even the smallest particle can be in space (*"An object 1 mm in size could break data cables"*). The larger particles are not as dangerous because all ~9000 items (*"larger than a softball"*) are being tracked, and can therefore be easily avoided. It says that shuttles fly in the best possible orientation so that debris does not hit vital areas and that dangerous/fragile items are not located near the outside, to reduce risks. Most of the article is concerned with the International Space Station (ISS) which is protected by Whipple shields (over 200 kinds of shields). The ISS is coated with Kevlar (material used in bullet-proof vests) but is made of otherwise damageable material (mostly aluminum). *"The shield is a thin bumper that is placed in front of the spacecraft pressure shell. Any meteoroid or piece of debris will tear itself apart when it hits the bumper. A standoff – open space – is put between the bumper and the wall of the spacecraft to allow any remaining bits that make it past the bumper to spread out."*

6. NASA. "Junk in Space." Headline Universe. August 2000. Last accessed: May 10, 2002.

<[http://windows.arc.nasa.gov/tour/link=/headline\\_universe/junk.html](http://windows.arc.nasa.gov/tour/link=/headline_universe/junk.html)>

This news article tells us that there is debris orbiting the Earth, which could pose significant threats to other spacecraft. The Long Duration Exposure Facility (LDEF) was put into space to take surveys of meteoroids and debris in space and test the shielding used for future spacecraft. The Aerospace Corporation in California will make a center which analyzes space debris avoidance.

7. NASA. "Hypervelocity Impact Test Facility." White Sands Test Facility: Hazards Assessment. Last accessed: May 15, 2002.

<<http://www.wstf.nasa.gov/Hazard/Hyper/debris.htm>>

This article goes over very basic facts on Orbital Debris. It states that millions of objects are hitting the Earth at average velocities of 10 km/s. Some debris is even made up of existing debris hitting other debris. The *"greatest challenge is medium size particles (objects with a diameter between 1mm and 10cm) because they are not easily tracked and are large enough to cause catastrophic damage to spacecraft and satellites."* The article also discusses shielding, but not in as great detail as in *Artificial Space Debris*.

8. Faust, Jeff. "The Dangers of Orbital Debris" Last accessed: May 21, 2002

<<http://seds.lpl.arizona.edu/spaceviews/9703/articles.html>>

This source gives examples of the dangers of debris (i.e. CERISE) and goes on to explain how debris is counted. About 6,000 objects in LEO are being tracked. (5% of which are operating space-craft). *"40% of \*trackable\* objects in LEO are old spacecraft or upper stages!"* The ISS is especially vulnerable because it will be in orbit for ~15 years, and is the largest object in LEO. The article has a very interesting "Dealing with the Problem" section.

9. Hunt, Jeff. "Introduction to Visual Satellite Observing. March 2002. May 21, 2002 <<http://home.att.net/~janjeff/satintro.htm>>

There is a short section here (1.1.4) on Space debris. "*Debris objects represent 58% of total cataloged objects*" It tells a little bit about how things are catalogued based on numbers and International ID numbers. Also, the "*first reported collision between two catalogued space objects*" was in July 1996. (CERISE with debris from Ariene)

10. NASA. "The Shuttle/Mir Program" May 2001. Last accessed: May 21, 2002. <<http://www.satobs.org/mir-shuttle.html>>

This source just lists the mission history to the Mir space station.

11. NASA. The Orbital Debris Quarterly News. (April 2002): Vol. 7-Issue 2.

Contains the April 2002 News, describing the Leonide storm of 2001, and a Reentry survivability analysis of the Upper Atmosphere Research Satellite (UARS). A project review of the Albedo Distributions of Debris and a few meeting reports are also included. [The term Albedo describes the relationship between the brightness of an object and its size.]

12. United Nations. Committee on the Peaceful uses of Outer Space. Technical Report on Space Debris. New York: United Nations, 1999.

On the whole, this reference contained a considerable amount of information. It seems that NASA is more interested in preventing Orbital Debris than cleaning up what is there now. It also discusses money issues with regard to mitigation. There is an explanation of different types of models used by NASA, and different ways of measuring the amount of debris. In particular, Figure II (pg. 14) is interesting with the number of objects in orbit vs. the year. It shows the relationships between the amount of objects in orbit all together, and the amount of spacecraft and rocket bodies etc. in orbit.

13. Olson, Steven. "The Danger of Space Junk." The Environment. July 1998

It is stated that the ISS has about a 20% chance of undergoing a "critical penetration" within a decade. It is not clearly explained how this estimate is obtained. The article states that this percentage will increase because the private sector now puts more payloads into orbit, than NASA and the U.S. as well as Russian military sector combined. Again, this claim is not supported by data.

14. BBC News. "Space Debris Warning." May 15, 2001. Last accessed: May 25, 2002

<[http://news.bbc.co.uk/low/english/sci/tech/newsid\\_1351000/1351233.stm](http://news.bbc.co.uk/low/english/sci/tech/newsid_1351000/1351233.stm)>

Two private researches state that more action needs to be taken to reduce space pollution.

15. Dator, Jim. "What has Posterity Ever Done For Me?" July 19, 1995. Last accessed: May 24, 2002.

<<http://www.futures.hawaii.edu/dator/space/posterity.html>>

This is a colloquially written article about space debris and an invitation to think about the future. The main point the author was trying to make was that we should not put anything into space that we don't plan to take out of orbit again. Many references are given.

16. United States. Office of Technology Assessment. Orbiting debris: a space environmental problem. Washington G.P.O. 1990

This report is in essence a bulleted list of suggestions, findings, statistics, etc. relating to space debris (in 1990) ... There is a list of "Nine Common Misconceptions" (pg 11) which is interesting to read through, although they may not be completely accurate now. However it does have a section explaining clearly how debris is classified, and what some laws (both U.S. and international) are that govern how space debris is dealt with.

17. Johnson, Nicholas L. Artificial space debris Mapabar, Fla, Orbit Book Co., 1987.

//Nicholas Johnson (main author) also wrote the FAQ cited above.

This book discusses the different sources of space debris from operational activities (deposition of spent rocket parts in orbit) to satellite fragmentation due to unknown causes and then talks about the space debris environment with references to the Satellite Fragmentation Event (SAFE) Test and Gabbard Diagrams. Another chapter is devoted to hazards from space debris, which discusses several debris models, and the Impact Theory (Bjork Equation(!)). The book ends with a look toward the future, and how to live with the environment as it is now, and how to clean it up for the next generations.

18. National Research Council (U.S.). Committee on Space Debris. Orbital debris: a technical assessment. Washington, D.C.: National Academy Press, 1995

This book was written "to acquire an unbiased technical assessment of (1) the research needed to better understand the debris environment, (2) the necessity and means of protecting spacecraft against the debris environment, and (3) potential methods of reducing the future debris hazard." The research was sponsored by NASA which wanted the authoring committee to:

- "characterize the current debris environment,
- project how this environment might change in the absence of new measures to alleviate debris proliferation,
- examine ongoing alleviation activities,
- explore measures to address the problem, and
- develop recommendations on technical methods to address the problems of debris proliferation."

19. "MSL – Glossary of Terms." Mission and Spacecraft Library. Last accessed: June 9, 2002. <<http://samadhi.jpl.nasa.gov/msl/glossary.html>>

Glossary of terms.

20. "Korolev – Sputnik" Last accessed: June 9, 2002.  
<<http://www.hq.nasa.gov/office/pao/History/sputnik/harford.html>>  
Politics, planning, and technology of the period 1946-1950 are described here, in particular, the development of the R-7 ICBM technology which made the launching of artificial satellites possible.  
Within the description of the launches of sputnik 1,2 and 3, the failure to map the radiation belts is mentioned.
21. Graham, John F. "Sputnik – the Space Age Begins." 1995. Last accessed: June 9, 2002. <<http://www.space.edu/projects/book/chapter10.html>>  
Launchings of Sputnik 1 and 2 are described as well as the U.S. response in form of Vanguard and Explorer.
22. Nauts, Inc. "Space Vehicles Past and Present." 2000. Last accessed: June 24, 2002 <<http://nauts.com/vehicles/index.html>>  
Provides a catalogue of space vehicles launched beginning with Sputnik.
23. Berstein, M. D., Benny J. Sheeks. Field observations of medium-sized debris from post-burnout solid-fuel rocket motors. MIT Lincoln Laboratories.  
Solid-fuel rocket motors are well recognized as a source of numerous small-sized (10 $\mu$ m or less) debris that are ejected at high velocities during the propellant burning process. Medium-sized (1mm to 10cm), low velocity versions of these metallic oxide or other combustion chamber debris have also been reported from static ground tests of these metallic oxide or other combustion chamber debris have also been reported from static ground tests of solid-fuel motors. Field observations of a third component of the debris generated by solid-fuel motor operations are presented in this paper. These are medium-sized debris that are expelled at low velocities through the rocket motor nozzles after the nominal cessation of propellant burning. These post-burnout debris, referred to as chuffing debris, may be a significant component of the orbital debris environment. Radar and optical measurements of these debris have been collected during numerous sub-orbital flight tests conducted over the past several years. The large database of such observations that has now been accumulated indicates that such post-burnout debris are a generic consequence of solid-fuel rocket motor operation. Selected portions of this database are reviewed, and a preliminary model of such medium-sized debris production is presented that is suitable for correlation with existing orbital debris observations and population models. [Abstract straight from source]
24. Chan, K. Collision Probability Analyses for Earth-Orbiting Satellites. Aerospace Corporation.  
This paper is first concerned with a detailed calculation of the collision probability between the primary spacecraft and a single secondary orbiting object. The analysis is then extended to the case in which the secondary objects comprise a class having specific altitude and inclination, the latter parameter not necessarily the same as that of the primary spacecraft.

25. Sridharan, R., W. Beavers, E. M. Gaposchkin, R. Lambour, J. Kansky. "Radar and Optical Characterization of an Anomalous Orbital Debris Population." Journal of Spacecrafts and Rockets 36 (1999): pgs. 719-725.

Analysis of orbital debris data collected by the Haystack radar have shown an anomalously high concentration of debris between the altitudes of 800 and 1000 km. Indications from the Haystack data are that the debris range in size from 8 mm to 2 cm and that they are spherical in shape. Previous work by NASA researchers has shown the likely origin to be the leaking of liquid coolant from the nuclear power sources of a now defunct Soviet space-based series of ocean surveillance satellites. We report on a project at Massachusetts Institute of Technology's Lincoln Laboratory to detect, track, and characterize a small sample of the anomalous debris using ground-based radars and telescopes. Our goal was to provide evidence supporting or refuting the NASA conclusions. We have determined that the size, shape, density, and surface properties of the debris are consistent with the hypothesis that it is liquid, eutectic sodium-potassium coolant like that used in the Soviet satellites. The techniques used to detect and track the debris are discussed. The radar and optical data used to characterize the debris are also presented. [Abstract straight from source]

26. Sridharan, R., W. Beavers, R. Lambour, E. M. Gaposchkin, J. Kansky. Remote Sensing and Characterization of Anomalous Debris. MIT Lincoln Laboratories.

Analysis of orbital debris data has shown a band of anomalously high debris concentration between 800 Km. And 1000 Km. Detective work by NASA has shown the likely origin to be leaking coolant fluid from nuclear power sources that powered a now defunct Soviet space-based series of ocean surveillance satellites.

A project has been in progress at MIT Lincoln Laboratory to detect, track and characterize a small sample of the anomalous debris. The primary sensors used for the purpose are the Haystack radar, the Millstone hill radar, TRADEX and the Firepond optical observatory. The major questions being addressed are:

1. What are the size and shape of the sample set?
2. Can we infer the composition of the material the droplets are made of?

The techniques being used to detect, track and characterize the sample set will be described in this paper. Results of the characterization analysis will also be presented.

27. LeClair, R. A., R. Sridharan. "Probability of Collision in the Geostationary Orbit." MIT Lincoln Laboratories.

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28. MASTER '99 – Meteoroid and Space Debris Terrestrial Environment Reference Model, 1999. Manual.

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29. NASA. "EVOLVE." Orbital Debris Model EVOLVE. June 18, 2002. Last accessed: June 24, 2002.

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30. NASA. "The Orbital DEbris RADar Calibration Spheres (ODERACS)." ODERACS. Last accessed: Jun. 24, 2002.

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Describes the method used for calibrating the Haystack Radar in MA, with the use of a known number of spheres in orbit.

31. Space Debris. (1999): Vol. 1-Issue 1. Ed. Walter Flury and Donald Kessler. Kluwer Academic Publishers. Norwell MA.

Contains a description of the IDES space debris environment model; an error analysis of the probability of collision with the ISS; and a fragmentation model for high velocity impacts.

32. Space Debris. (1999): Vol. 1-Issue 2. Ed. Walter Flury and Donald Kessler. Kluwer Academic Publishers. Norwell MA.

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The descent of the EUVE (Extreme Ultraviolet Explorer) onto Earth caused significant worry, which is discussed in this article. The EUVE was scheduled to fall sometime in January, and was one of the "largest uncontrolled descents to Earth." An on board propulsion system is required for any spacecraft with a projected 1 in 10,000 risk of hitting someone.

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36. United States. U.S. Government. Orbital Debris Mitigation Standard Practices.  
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37. NASA. Orbital Debris Program Office. "History of On-Orbit Fragmentations."  
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## Appendix A:

Dr. Sridharan – Let me tell you a little bit about the kind of work that I have done in debris. I am not an expert in debris by any means, but I probably know more about space debris in Lincoln Labs than anybody else. Two experts in space debris work at Johnson – NASA's Johnson Space Center in Huston.

– **Yes.**

Dr. Sridharan – I don't know if you've touched base with any one from there.

– **I haven't, but I hope that I can get in contact with them...**

Dr. Sridharan – Yes, I will introduce you to a person, over the phone, to a person who has been in this area for a very long time – Gene Stansbury. He's always delighted to help faculty and students. Gene probably would be the best person. There is also another person by the name of Don Kessler, who literally started the whole study of space debris. He is an outstanding example of what I call a true scientist, that is, he identified a problem, he researched into that, wrote several papers, made it a technical discipline that was worth pursuing. Today, as a result of that, there are any number of space debris conferences that go on, and Don Kessler has been responsible for that. And I've known Don Kessler since the early days that he started debris research. The genesis of the space debris problem lay in the fact that NASA was considering sending long term space station into space – this was back in the 70's and early 80's. and at that time, Don Kessler realized, that not only were there lots of satellites up there, but there also lots of rocket bodies, lots of other various kinds of fittings and such other things that go on every time a satellite was lost. Plus, there were several identified cases where rocket bodies have exploded in space and left pieces of debris of various sizes. Satellites have broken up in space, fragmented some how or another, and left pieces of debris. So, he started looking at the issue of how much space debris there was, and whether those could be a potential hazard to a manned space station. Space shuttle, on the other hand, generally does not stay there long enough to worry about. Space station was supposed to be very long time. Now, as a result of his effort and research into it, several results came out, but most important thing is NASA did decide that it was safe enough to put the ISS there, because there was some question at that point – and if the space debris problem had been significant enough, then they may have decided against putting the Space Station up. Now, you might turn around and ask, "What use is a Space Station?" There is still some question about that. I am still relative skeptic except for the fact that its an interesting place to do some particular kinds of experiments but if its worth the umpteen million dollars, I do not know. I am still a little skeptic – but leaving that aside, once NASA decided to go to the SS, and part of the justification was, if we were to plan to send people to Mars, then we needed long term explosion studies of people – what would happen to them in a weightless environment after a long time, and the Space Station was the logical place to do that. Now, the problem in debris is that not all debris is detectable and track-able by ground based radars or ground based optical systems. Now to do that ... by the way, interrupt me any time you have questions ok? I tend to use jargon quite a bit, so feel free to stop me and ask questions ... The airforce, has historically had a mission – they have to keep track of all satellites ...

**Prof. Labonté – SPADATS?**

Dr. Sridharan – SPADATS is one word to use for that, but fundamentally, this was a mission that was defined for the airforce and the reasons were obvious because without them we had to know what new satellites were doing and where they were – we had to know where the adversary satellites were, where the soviet unions satellites were, where the Chinese satellites were and so on and so forth. So, the airforce has a mission. Now, that mission was very broadly interpreted to include not only active satellites, satellites that are doing something. Kessler very quickly realized that in the lower altitudes that he was concerned with, the space station is only about 350 km or 400 km. So you really you really wanted to assess what the different populations was that could potentially come down to that altitude and impact the space station. So Kessler quickly realized that current long-based space surveillance system, radars, optics, whatever, did not detect and track, routinely, small things. They were capable of tracking, detecting and tracking,



things that were larger than a particular size, but smaller than that size, they usually did not detect them – simply because the radars were not powerful enough to do that. I don't use optics because usually the low altitude satellites, they are not sunlit all the time so it's very hard to detect them. So at that time, Kessler, and Gene Stansbury, and so on, did a study to figure out what types of radars would be needed to detect and track all debris in space, down to say a cm in size, about this size.

– **But they can't track 1 cm down, can they?**

Dr. Sridharan – Not now. So they did a study on what kinds of radars would be needed to do that – and they came up with a very nice report which Gene Stansbury can send you, I cannot seem to find it. The result was, that you needed many more powerful radars and they estimated a cost for these radars and it came to, at that time in the early eighties, on the order of a billion dollars to build the radars – this was *late* eighties, and a significant operation cost would be something on the order of 30-40 million dollars cost to operate the radars every year. At that time, NASA could not afford that kind of money, so NASA turned to airforce and said, "You have much because you are the one that has the space surveillance capabilities." The airforce was not willing to put that kind of money either, because the airforce had no interest in putting a man in space. It was presumably a joint with NASA, the man-in-space program, but very soon the airforce realized that for their missions, not the space surveillance missions, but all their other missions, they needed satellites, but they needed unmanned satellites with telescopes, and cameras, and communication capabilities, they didn't need a man in space. They still don't. The airforce still doesn't want a man in space. So airforce was not willing to put that money in either, and NASA then looked around and said "Well, what could we do with the available money we have?" and NASA came to Lincoln, or Lincoln came to NASA, I don't quite know how this happened, but we went to NASA and we said "We have pretty powerful radars here. We don't think we can track these debris on a regular basis, because tracking is not a problem, it is finding them that is a problem. However, what we can do is provide you detection data, that is, we can point the radar at the sky and let the Earth carry the radar around, and then as debris stream through the radar field of view we will detect them. We will provide you with detection data." NASA was really happy with that and supported us to do that and we have been doing that since '90, or '91 with the radar that you saw on the street. What that provides NASA, is characterization of data, that is they can now build a model of debris in space wherein by altitude, orbital inclination, and size, and then play that model against the detection data that we get here, and correct the model. So we have been supplying to them something like 800 hours of detection data on debris. So far with 10 years of data, they have been able to refine the model substantially. You really should talk to Gene Stansbury. The result of all that was that today there are estimated to be somewhere about 20,000 discreet objects up in space within the first 2,000 km of altitude. Its increasing because of more satellites coming in, but its also decreasing – one advantage of these low altitudes is over time the atmosphere drags things down. Slowly, but nevertheless, it does happen. So, now give you a feel for what these 130,000 means, the space surveillance catalogue that space ... carries, based on the normal tracking of objects larger than a particular size, is only about 10,000. So there are about 120,000 pieces of debris up there that are smaller than roughly 10 cm down to about a few mm, which are not routinely tracked but which can be detected by the powerful radars, like the ones we have. And NASA has been able to build a model based on that. The model in a sense of the model on the population based on what altitudes they're at, what orbital inclinations they are at, and roughly what size they are. Using that model, NASA is now able to calculate potential threat to the space station. Now, the space station was to be sort of harder, to withstand direct hit by something smaller than a cm. Smaller than a dime. Are you aware of what velocities are the objects?

– **Yes, its about 10 to 15 km/s.**

Dr. Sridharan – Yes, the average mean number is about 10 km/s. It could be much lower if they are in the same orbit traveling in the same direction, however it could be much higher if they are crossing orbits. 10 km/s is a good number to remember. See, even a dime coming in at 10 km/s can cause a significant damage to a space station. The reason why they believe that they can

withstand something smaller than a cm hitting them. The key parts of the space station, those that surround the parts where human beings are located, the parts where the particular kinds of systems that are very critical to operation and life in a space station, the air-conditioning and so forth and those kind of things. Those are all shielded by a derivative of what are called Whipple shields. Have you ever heard of Whipple shield?

– **Yes.**

Dr. Sridharan – Fred Whipple at Harvard University developed the current design of the space station is based on that – its not a Whipple shield really, but we still call it a Whipple shield – it's a derivative.

**Prof. Labonté – Excuse me, did the Russians follow that?**

Dr. Sridharan – No.

**Prof. Labonté – They weren't responsible for the habitation module, were they not?**

Dr. Sridharan – Oh, today. For the space station, yes they did. Who has had most experience in space in terms of long-term research and astronauts? It's the Russians. The cosmonauts have been on the MIR space station much longer periods of time than our astronauts have been. And the MIR space station was really never strengthened for orbital debris. And the Russians really never did see studies of orbital debris in those parts until Kessler founded the discipline and started provided informational data. Partly because the Russians did not have them today the kinds of radars that are essential to making studies. Today, if you ask Gene Stansbury, which you should, he'll tell you that with a probability of 1, the Space Station will be hit by something larger than a cm once in about 30 years. That's a long period of time. In a sense, the Space Station is relatively speaking safe. So, that is sort of the state of space debris in the first 2,000 km. Why worry only about the first 2,000 km? That's what is likely to impact the Space station. Given that the first 2,000 km, and the way I got into them, these interesting studies of debris, there are regions where there is more debris, and there are regions where there is less. There's roughly half of these percentile of pieces, or 60,000 pieces exist in a very narrow altitude region. Between about 850 and 950 km. You've read about this.

– **Yes.**

Dr. Sridharan – The Soviet Union used to launch nuclear powered satellites, for particular purposes, I can't tell you what purpose it was. These satellites, once they're in very low altitude, usually about 300 km, so their lifetime, orbital lifetime, is not very large because the atmosphere driving it back. But once their function is finished, typically within a year, the payload is separated from the power supply, which was a nuclear powered power supply. And the nuclear powered power supply would be boosted up to about 850, 900 km altitude, circular orbit, and left there because they realized that they would have gotten into a lot of trouble if they had brought down nuclear powered modules into the Earth. Somehow, there was a design flaw in the nuclear powered module. The nuclear power core was cooled by liquid sodium and potassium, and so, somehow when they put it up at that altitude, the liquid coolant, sodium and potassium somehow escaped from the... The coolant fluid essentially leaked out. We don't quite know why, because the Russians would never explain why.

**Prof. Labonté – Did the rocket explode?**

Dr. Sridharan – No, no. What we suspect is that there was a faulty design that somehow caused, during this process of ejecting into that orbit, one of these coolant tubes either opened up, or a valve to open up, or something, this has happened on more than one of these powered, not all of them, but more than one. And what happens when liquid leaks out into space, it forms spheres – perfect spheres actually – so you find that in that 850 to 950 km altitude orbit, at 65 degrees inclination to the Earth, something like 60,000 spheres, sodium potassium spheres, of varying sizes from a few mm to about a few cm. The largest one that we have detected is about 5 cm, so we suspect that it is limited by the size of the coolant tube or something. So, we did a fair amount of assessment. NASA suspected this based on their ideas about orbiting characteristics and what they knew about the Russian program and they asked us to independently take a look at a number of these debris to assess whether we could tell the size, shape, number and whether they were sodium potassium and so on and so forth. We did most of

it. Without reaching out and touching it we can't really confirm that it's sodium potassium, but it has a lot of characteristics of that and that's what those papers are about. But that's in a narrow band of altitude about 100 km - 850 to 950 km. And they will last a long time. Their orbital lifetime is on the order of 100 years. We also estimate on how long it would take to ... since it comes out as liquid, whether it's still liquid or solid depends on whether it's in the sun, or in the shade and it can evaporate some liquid, essentially. The orbital lifetime based on that is fairly large. They will stay there for a long time.

So, are those particular sodium potassium spheres very dangerous?

If they hit you its very dangerous. Their half-life in terms of radiation is probably 65 years or something or maybe more. But we don't know beyond that. I mean, I don't think the radioactivity is the issue, I think if you put a satellite up there, and being hit by one of these at 10 km/s is the issue. Now, from the Space Station point of view, that's not important. But in turns out that the 850 to 950 km altitude is very desirable from a different perspective. There are what is called "sun synchronous orbits" ... I don't know if you've ever heard of them?

– **Yes.**

Dr. Sridharan – Ok, what they do is these orbits process around the Earth at the same rate that the Sun moves about the earth or the Earth moves about the Sun, the point is ... And as a result they can always keep them in sunlight so that it can always be hot, or, it can always keep them in such an orientation that one part of the orbit is always sunlit, and the other part of the orbit is always dark. It's done very scatter ...? about it. A number of requirements for satellites use that kind of orbit. The ones that can provide you with photographs or on your weather channel provided that the land satellites which look down at the Earth and take measurements of vegetation and so on and so forth, they're in those orbits. So they are very desirable orbits from a number of different perspectives. And they can provide a repeating ground track so that we can examine the same part of the Earth in the same solar illumination conditions every day or every 50 days, or some time, and trying to infer long term radiation(?) of what is happening on the Earth – that is extremely useful. So these kinds of orbits are very popular, and there are a number of satellites that are in that altitude regime all of them threatened by this swarm of sodium potassium debris. However, this is low enough that we have not had collisions yet. In fact, to date, the only known collision in space of a satellite with a piece of debris ... with something else, is the French spot, the CERIS satellite, which is an interesting satellite sort of like this (coffee cup) with a long boom. And the boom is a method of stabilization – The boom is such that it is either oriented directly towards the center of the Earth, or directly away from the center of the Earth regardless of where the sunlight is. And another piece of debris from the rocket body that actually *launched* the CERIS came and hit the CERIS and broke of its boom, so the boom broke off half way. So now the satellite has only half the boom – the other half is separate. Strangely enough, satellites are built with so much redundancy that as soon as the French space agency realized what happened, they were able to reacquire control of the satellite, and continue to make it useful even though it had a shorter boom. That's the only known example of significant damage to a satellite that has occurred to our knowledge.

Prof. Labonté – Didn't we some years ago have NASA launch a Satellite to test a whole bunch of different materials in the long term ... what did they call it? The long term...

Dr. Sridharan – The LDEF, Long Duration Exposure Facility, there is an interesting history to that one too.

**Prof. Labonté – Didn't that get some damage from debris?**

Dr. Sridharan – Yes. The LDEF was launched. Its sort of a huge platform, like this (table) and it had on all its sides and top and bottom, various types of sensing material to make measurements of debris size and so on and so forth. And it was designed such that it always presented the same orientation with respect to its velocity vector which made its travel so that all the debris coming in the direction coming in opposite to its travel would always hit the same surface and similarly if debris were coming in from outer space, meteoroids for example, it would always hit the top. The LDEF was launched and it was supposed to be up there for six months ...

Prof. Labonté – But it stayed up for much longer

Dr. Sridharan – Yes. What happened was the challenger disaster took place, and as a result we could not bring up a shuttle to bring it down so it ended up being there for 3 years or 4 years, so it provided a lot more data than we anticipated. And a lot of the models for space debris, very small debris, the ones that cannot even be detected by these powerful radars, come from LDEF data. Also, data from impacts of the space shuttle and so on. So, you get those kinds of information. And NASA has also been developing meteoroid models, again, for the space shuttle perspective. Their model dates back to the 60's and it has been improved slightly with the years, but not very much. In fact that's an area where there is really serious work that needs to be done to improve particular models. And the person I mentioned who is doing the work at BU, is working on not modeling the meteoroids, but analyzing data that we are collecting on meteoroids over the last few years.

Prof. Labonté – So that's part of what Irma is more interested in. Which is the more serious problem?

Dr. Sridharan – That's a very hard question to answer. Sigrid Close, this is the person who's doing her PhD, her estimate is that the data that we have from the radars on meteoroids, is that there are roughly 100 billion meteoroids that hit the earth everyday. These meteoroids are tiny. We're talking  $10^{-3}$  to  $10^{-5}$  grams. Very tiny. However they do come in at about 30 km/s. The best models that exist for results of an impact is that with orbital debris, that is man made space debris of anything larger than a cm, or a few mm in size, causes two kinds of problems. It can create holes in solar panels and so forth. There is a classic photograph of the Hubble space station where they replaced the solar panels, and they brought the whole thing down. There was a neat little hole the size of this diameter, clearly caused by some debris hitting it and going through, because the solar panels are very .??.? you see. The other thing that man-made space debris can cause is it can cause altitudinal instability. It can hit a satellite which is supposed to be altitude stable. It can perturb its altitude. Do you understand what I mean by altitude?

– Yes.

Dr. Sridharan – It could conceivably cause it to lose control of its altitude, but that has never happened so far. The third thing is, it could break a satellite, like what happened to the CERIS satellite. But the more serious thing is that if it hits it at the right part, it can cause the satellite to fragment into a number of pieces. But this was one of the early derivations that Kessler made, as to what kind of impact it would need to have to cause cascading – that is, you hit the satellite, and that satellite breaks up into hundreds of pieces, and these hundreds of pieces now have increased the threat against other satellites that are in orbit too, and they hit them, and cause a chain reactions. We have no where near the density of debris to cause that kind of problem even in the region of 850 to 950 km. But it is a potential concern. Kessler believes, that the asteroid belt, for example, or Saturn's rings, and so on, are regions where this density is exceeded, and the result is cascading, causing a lot of debris to turn up, and smaller and smaller debris to turn up. One of the mechanisms for the formation of those rings is supposed to be this cascading. I will just state that, I have not looked into analyzing, I do not know whether this is true or not. The asteroid belt, and Mars and Jupiter is supposed to be like that. But leaving aside cascading, to a satellite, every man-made debris tends to be a greater problem because it can cause either upsetting of altitude, it can cause holes in the solar panel, which means that the current or the power produced by the solar panels decrease, or it can cause the satellite to break up – catastrophic breakup. The meteors on the other hand, are very tiny. We're talking  $10^{-3}$  to  $10^{-5}$  grams. But they come in at a high velocity. We believe the phenomena of the impact is that it causes plasma. It hits at a high velocity, and you don't really see what happens to the particle, but what you see is electric discharge on the surface. And depending on what part of the surface that is, that could cause no problem, or that could cause local lightning which could short out something. As to whether any satellites have been damaged by meteoroids, its very hard to answer. There have been satellites known that have been affected at the time of a meteor shower, or at the time of a solar storm. A solar of course doesn't cause meteoroids, it's a different phenomenon. But inferring that it was caused by meteors, or the solar storms, and



proving it are two different things – we just don't have the kind of sensing mechanisms in these satellites that could be able to tell that this was the cause of the problem, because satellites fail often, for other unknown reasons too, internal reasons. This person Sigrid Close I mentioned has put together something for you on meteoroids largely, and she does mention a couple of examples of satellites that have supposed to have been affected by meteoroids, but its hard to prove that. Certainly, if you're talking space station, meteoroid population has not as much of a concern as the space debris population – as the manmade space debris population.

– But there is more natural debris than man-made debris?

Dr. Sridharan – Yes, there is much more natural. Micrometeoroids there is much more. One estimate is that there is 100 billion meteoroids that hit the Earth every day.

– But there are lots and lots of natural pieces that are 10 cm or bigger?

Dr. Sridharan –This is the meteoroid population we're talking about. Most of them tend to be very tiny bits. In particular meteoroid belts, like the Leonis meteor showers, or the Perseus ... I forget what its called meteor showers, there could be larger objects, but we don't know how much.

– But there are pieces of asteroids up there, that are just as harmful as anything we could put up there?

Dr. Sridharan – Certainly true, for example, in the Leonis meteor showers, in the big density, not only have billions of very tiny particles but do have a number of large particles. I don't think it has been adequately characterized as to how many of what size. So the information is lacking. Then there is the whole other area of concern, which is sort of concern for the whole Earth not for satellites, which is to hear of asteroids and so on. Is that what you are talking about? ..... As I said, I don't think there is adequate characterization that I know of -- you should talk to Sigrid Close about this, she is not here, she's at a conference this week, that is why she is not here with me today. We really don't know how much big stuff is in those meteor showers, -- there's probably some, but the density is not known, so we don't know really what the danger due to that is. There are suspected to be at least 2 geostationary satellites which have an equatorial orbit. There is suspected to be at least 2 of them which have been damaged by either meteors or solar storms of some kind, but I don't think in either case, it was conclusively proved that it was this problem, and not a malfunction of some attribute due to the system leading satellite. We don't know. The reason to infer that it was meteors or solar storm related, is that it occurred when there was a meteor shower, and when there was a solar storm, so no cause and effect, just an inference based on phenomena that existed at the time. Unlike the case of the CERIS, where we could work back and prove that indeed it was hit with high probability it was hit by the rocket body, and that is what broke the boom off. In the case of these two satellites, we can't really tell. As to what the natural danger is, with respect to the satellites, I don't really know. I just suspect that most of the meteoroids are tiny, and the kinds of problems that they cause, is very different from the kinds of problems that are caused by significantly sized orbital space debris which can really upset the altitude of the satellite or break it up. Largely, these micrometeoroids whose coming all the time to the Earth they cause some kind of plasma, some electric discharge, which may or may not be significant.

Prof. Labonté – That's fascinating to hear you talking about these things. I just read something in the paper about the current space shuttle saying that the group that's just gone up, was there to replace panels that were put outside of the Russian module to protect it from the space debris, because the Russians hadn't met our requirements, whatever that meant.

Dr. Sridharan – Cheated a little bit...

Prof. Labonté – Well, I don't know. They probably figured "We built MIR, and look at how long it stayed up, don't tell us how to do that business." Irma has always mentioned to me that if all that stuff up there is a significant risk, then why aren't we doing something to clean it up?

Dr. Sridharan – I'm getting to that. One of the questions that is being raised is "Can we do something about this debris?" apart from characterizing debris and apart from assessing them – can we mitigate the debris? There is the natural mitigation process which is the atmosphere bringing it down – that's a slow process. Depending on the altitude it can take several months,

and when you go out to 900 km, it's a hundred years or more. So that's a very slow process. There are several other options that were looked at. One was, "can you put a net in orbit which would catch debris?" Well, very quickly, people realized that putting a net means getting hit by something at 10 km/s, and it's sort of hard to build a sturdy net that can grab all of these things. Another question was "Is there any way to use something powerful from the ground, like a laser, to blast these debris to pieces?" But then, all you did, was you took something 10 cm in size, and created 100 particles 1 cm in size. That's not a sensible thing to do, you just increase the potential damage, rather than decrease it.

– But then you don't get hit by something as big.

Dr. Sridharan – That's true. But probably, if you're vulnerable to something 1 cm size debris, then it doesn't matter to you whether you're being hit by a 10 cm piece of debris, or a 1 cm piece of debris. If you increase the risk 100 fold, you have not succeeded.

– And also they can track anything that is bigger than 10 cm and they can avoid them.

Dr. Sridharan – Good point, very good point. Another suggestion that was made was "could you use something like a laser, to add energy to the debris forcing it to come down, essentially changing its orbit. Its altitude comes down, and that was the genesis of that study. This was sponsored by NASA and the JSC, and many people participated, and I was one of them. 3/4 people were from LL. And this was the final report of that. Basically, the report showed "Yes, it is feasible, but not today." The kind of lasers that you would need do not exist yet. At some point, to be able to bring debris down, you add just enough energy, and the way you do that, you illuminate the debris, cause a slight surface abrasion, and as the surface particles stream out, that causes action reaction, equal and opposite causes an emission of particles, or depending on which direction you are forcing, that decreases the velocity vector. And as a result, the satellite will come down. That was the concept. There are lots of intricate problems involved, apart from the laser, you have to be able to acquire, detect and track these debris, point the laser at it, and choose the right part of the orbit and so on. So, there are a number of problems, but all it showed in principle, what that it's feasible, but there's a lot of work involved in doing that, and if the situation were serious enough, then one could dust off this report, and start looking at the possibility. I don't think there are any other, to my knowledge, methods of debris mitigation in space.

– Wasn't one of them to not let the things that are up there now, that stop working, go somewhere else, making the problem not grow any bigger?

Dr. Sridharan – Exactly. The debris mitigation I am talking about is removing existing debris that is orbiting there. I don't know of any other methods. However, there is beginning to be international agreement, it's not final, there is no legal requirement as such, but there is beginning to be international agreement. That when you put a satellite into space, you do two things. One is, you ensure that the rocket body, that takes the satellite into space, which also has to get into orbit to put the satellite up into space, then you leave enough fuel in the rocket body, so that you thrust it, and force it to come down, quickly – not last for a long time. It doesn't have to come down the next orbit, it can come down in a few years, but nevertheless it should not be there for very long. The second thing is, that when you do this, you also deplete all the fuel in the rocket body, because one of the reasons why rocket bodies can cause fragments is by exploding. – They explode because they have fuel in them. So, to deplete all the fuel in there, so you deplete all the fuel in there, so the rocket bodies do not explode. We essentially, what is called, incapacitate the rocket body. And both of these techniques have been adopted by a number of satellite launches to ensure that they don't leave rocket bodies up there. Another requirement has been, a requirement, at least a suggestive requirement, you do not have appendages to the satellite which will be ejected from the satellite. For example, a lot of satellites, have telescopes. And on the launch pad these telescopes have covers on them to prevent debris getting into the telescopes. In space, the cover is removed – there are two ways to remove the cover – one is to open the cover but keep it attached to the satellite, but not in the optical path. The other way is to eject the cover. So the idea is not to eject the cover,

whereby we create another piece of debris, but ensure that the cover is open-able but is captured by the satellite itself immediately.

Prof. Labonté – That suggests that by agreement we can do things that limit future debris.

Dr. Sridharan – Yes, essentially almost all launching agencies follow these guidelines, these days, even the smaller launching facilities, that don't launch that many satellites, like the Chinese, the Indians and so on, have begun to follow these requirements now, so as to reduce the future debris. Also then, there is another requirement, a suggested requirement, that you leave enough fuel in the satellite itself to either move the satellite out to a safe altitude, either bring it down a low altitude, or, in the case of a geostationary orbit, which is a very popular orbit, there are lots of satellites up there, to move it out of geostationary band, raise it another 300 km above the equator, the geostationary band itself is 42000 km away from the Earth, circular orbit, and raise it another 300 km, or more, if you want to, away.

– Can't we just push thing out of orbit, so that the fly away.

Dr. Sridharan – We can push things out orbit, but into some other orbit.

– No, out of Earth's orbit.

Dr. Sridharan – That takes a lot of fuel. And you can't leak. A useful satellites lifetime these days, is decided by the amount of fuel it carries. Particularly take satellites like Iconos, or geostationary communication satellites, and so on, these are all revenue producing satellites, so a company owns them and collects money from them. The lifetime, or how much revenue they collect, is essentially dependent on the amount of fuel the have for maneuvering the satellite and keeping it in its orbit. And typically these satellites carry enough fuel to last several years. At the end of that, if you still leave enough fuel in there, to move it out of the orbit, then you have lost so much revenue. It's a balance – are you going to pollute the skies more, or are you going to reduce your revenue? This is a contest that has been going on for a long time. Particularly, in geostationary orbit, it has been somewhat depressing, because not enough people have invested in moving their nearly dead satellites out of the geostationary band. .??.? People are beginning to do that now, but there is lots of stuff up there, dead satellites up there, that are floating in geostationary orbit, posing hazards to other satellites. In fact, one of the papers I have pertains to that, and just so you don't get the feeling that LL is the only one that does all this work, there is someone from the Aerospace Cooperation that does this work too.

Prof. Labonté – So, there doesn't seem to be anything that can be done – there are these economic pressures on the people who put up communication satellites.

Dr. Sridharan – There is one example, of a whole system, that resisted this economic pressure, and said that they would do the right thing – its called the iridium satellite cooperation. They launched 60+ satellites, and right from the beginning they said, each satellite would last only 5 years or 10 years, and they would leave enough fuel onboard the satellite to bring it down, to the atmosphere,

Prof. Labonté – IOW, just change the orbit, and eventually through friction she comes down...

Dr. Sridharan – Right. But they were willing to pay the cost, the lost revenue, of a certain amount of fuel, and we all know what happened to Iridium. They went bankrupt, and now the DoD has basically bought them, so..

Prof. Labonté – We have to rely on the Department of Defense to do something rational. Sometimes that works.

Dr. Sridharan – So, in geostationary orbits, for example, there are a few examples of satellites that do get pulled down to a different orbit, but lots of satellites are just dying in space.

– **So are they standardizing it, to make sure that ...**

Dr. Sridharan – Trying to. The problem is, there is no legal requirement, that is by international consensus, that this kind of thing is evolving. NASA has been a major force in pushing towards this kind of thing. And a lot of companies done the right things, but it's a very slow process.

Luckily, the threat is not high enough, in fact, curiously enough, if you look at the paper that I gave you on the geostationary orbit and collision probability. . The geostationary orbit is in worse shape than lower altitude orbits, because that's a very narrow shell, where there are ...

Prof. Labonté – Everyone wants to be in exactly the same place – right in line with Texas.

Dr. Sridharan – Right. And that happens to be a actually a worse situation in terms of pollution problem, than the low altitude right now. Its just a popular position. The good thing is, that relative velocity of these things is on the order of a few 10's to a few 100's of m/s –its not 10 km/s. That's the good news. The bad news is that if you talk what 10 m/s to 100 m/s is, its like 2 cars hitting each other head-on on a highway, and these satellites are not built to survive that. So the factor of orbital region is really in a way more dangerous right now, it will be very interesting work in that area.

Prof. Labonté – Its hard to imagine mitigating the problem, once its there, unless you have some sort of... You'd need a NASA mission to grab stuff and bring it back down.

Dr. Sridharan – This study that was done on laser debris mitigation really will work only at low altitudes. Once you get beyond that, it wont work, because ...

Prof. Labonté – How powerful a laser had you looked at?

Dr. Sridharan – I don't remember, but if you look at the paper... it's a long time since I looked at it. But it was powerful enough that there was only one organization that was even close to producing something like that, and that was .??.? ...it has built a laser that can send out 1 pulse every few minutes or something like that, but we need hundreds of pulses a second, so were nowhere near – that's a statement of fact. In the case of geostationary orbit, really, there is really no way to mitigate the current hazard only hope that we can mitigate potential, future hazards, reduce the amount of future hazard by .??.? This is more of a curiosity than anything else. Now, you might ask, "Where does all this debris at low altitude come from?" And I mentioned to you that they come from satellites breaking up, and rocket bodies breaking up and so on. And then there were the sodium potassiate cooling fluids ... another significant cause of debris, it turns out – and these guys that came up with the model looked at that, is solid rocket bodies. There are the rockets that fueled by kinds of things – one is, the liquid bodies – kerosene and oxygen, hydrogen and oxygen, that kind of thing. Then there are solid rockets, which, for example are solid fuel. They great advantage of solid fuel is that they're still hazardous to hangers, but they last a long time, and you don't have to refuel and remove the fuel, and so on and so forth. And you can keep it fueled up for a very long time. But the disadvantage of solid fuel is that once you start thrusting it, you cannot stop it until all the fuel is gone. But, it turns out, that in the solid rocket body, after all the fuel has been worked, there's still stuff that comes out, it's called chuffing, it comes out of the solid rocket. This is various components of the fuel, and un-burnt fuel and so on – they come out in fairly large sizes, and thousands, going from mm sizes to sizes "this" large. Solid rocket have been used to launch satellites into orbit, so they are one of the significant components of the debris in space right now.

– There was one issue that I found very interesting, and that is, that I have all these different sources and they don't all say the same thing. I was thinking that it was probably a problem with standards and definitions but I wasn't sure.

Prof. Labonté – Irma was mentioning on the way up, that one of the sources says... One said that since the beginning of the space age, there have been 30,000 things launched, and the other said there had only been 4,000. And I only found out yesterday, that when they said 4,000 they meant spacecraft.

Dr. Sridharan – Exactly. Can you reach out to that black thing? That ? It's a definitive word, of what satellites we know, of what rocket bodies we *know* have broken up. And there are some statistics in there on how many launches and so forth.

– So when they say "objects," and they don't mean space craft, what do they mean?

Dr. Sridharan – The problem here is the ... Most people, when they talk of satellites being launched, they mean only the useful part of the satellite. – the payload that does something useful. Every satellite that goes up, has at least one rocket body in orbit. Perhaps sometimes two rocket bodies. Plus, it may also have various pieces of junk that have come, the solid rocket body stuff, that is un-cataloged, and large number of sizes, large number of objects, or telescope covers, or covers for these things that are rejected and so on. Not everything is kept track of or counted. Space [experts??] call these 'resident space objects' So as to distinguish among them in orbit. When somebody talks about 4,000 having been launched, they mean satellites, they mean



satellites that do something useful. For every one, there was at least one rocket body sometimes two. So there were probably 5,000 other objects of that type. Plus there are lots of other ...

Prof. Labonté – Like the fairing that exists between one rocket body and another.

Right, various kinds of things. Then there are lens covers, and such other things also. It depends very much on what you count, and how you count.

– Yes.

Dr. Sridharan – So, it's a very fuzzy number. The 4,000 may be a little too low. The 30,000 is probably a little too high.

– **It confused me that it was *that* different.**

Dr. Sridharan – Yeah. And people didn't keep track of things. In terms of how much stuff was put up there. They were all worried about the payload, they forgot about the rocket body, they forgot about everything else. And just to confuse you a little more. You must have heard about the Westford needles program?

Prof. Labonté Yes. – Confuse our enemies.

Dr. Sridharan – When I was in India, as a student, first time I heard of Lincoln Laboratories, was because of this Westford needles program. Several staff members, in the early days of the space age, conceived of the idea of putting a belt of needles around the earth, at about 3,000 km altitude.

– **Needles as in...**

Dr. Sridharan – As in needles! Long thin needles of about this length (~3in) and you know, slightly bigger than the human hair. And put a belt of needles around the Earth, and then you could bounce signals off that so that the belt was always available to you so you provided tactical communications to the military. This was before the concept of communication satellites had really been developed. And geostationary orbits were not even thought of, this is before then. So, LL participated in the experiment called the Westford Needles, to launch a belt like this. It caused an *immense* controversy because Radio Astronomers were very worried that this belt would interfere with their observations of the stars and such other things. So, the then director of LL, no, the then staff member, who later became the director of LL, did a considerable amount of analysis showing that first of all we were putting up a demonstration belt that would not last very long, most of it would come down in about 2 years, and secondly, that the effect on radio astronomy and optical astronomy would be trivial. Not be noticeable. They had to attend conferences in Japan and such other places to present these results. Now, how many were in the belt? 10's of millions of needles. So, do you count them all as one launch, or do you count them discreetly? But I used to joke for a while, that the Westford Needles visited me every year, because somebody would call LL, and ask for the director's office. "This Westford Needles, what's happening to it?" And they would always forward the call to me, because I collected a whole bunch of literature on this.

Prof. Labonté – That's maybe one of the most controversial things the Laboratory ever got involved with.

Dr. Sridharan – Absolutely, absolutely. There were two launches. The first launch failed – it did not dispense the needles. The second launch dispensed the needles, and sure enough, it worked, then optical astronomers, and radio astronomers made measurements through the belt, and didn't notice any effect. And as was theorized, most of the needles came down within two or three years. But the controversy still lasts, even to today.

## Appendix B:

```
// A simple non-linear curve fitter to model some data
// Written by Jonathan Moussa, July 14, 2002

#include <stdlib.h>
#include <stdio.h>
#include <iostream.h>
#include <time.h>
#include <math.h>
#include <fstream.h>

#define NUM_PARAMETERS 4
#define MAX_SIZE      1000

double fit_function(double x,double *params)
{
    //stick the function here, with it's parameters
    return (params[0] * pow(params[1],((x-1950.0)/10.0)) - params[2] * pow(p
arams[3],((x-1950.0)/10.0)) + 80.0);
}

double least_square_fit(int data_size,double *data_x,double *data_y,double *para
ms)
{
    int i;
    double total = 0.0;

    for(i=0 ; i<data_size ; i++)
    {
        total += pow(data_y[i] - fit_function(data_x[i],params),2);
    }

    return total;
}

double get_rand()
{
    return 2*((double)rand())/((double)RAND_MAX - 0.5);
}

int main(int argv, char** argc)
{
    double x[MAX_SIZE],y[MAX_SIZE]; //43 points
    int i,size = 0;

    if(argv < 2)
    {
        cout << "You need an input file specified, silly" << endl;
        exit(1);
    }
}
```

```

//read data file
FILE *infile = fopen(argc[1],"r");

while(!feof(infile))
{
    fscanf(infile,"%lf %lf",&(x[size]),&(y[size]));
    size++;
}

//guess some initial parameters ...
double params[NUM_PARAMETERS];
params[0] = 808.0;
params[1] = 0.458;
params[2] = 1270.0;
params[3] = 0.315;

//the initial variance of the parameters
double variance[NUM_PARAMETERS];
variance[0] = 1.0;
variance[1] = 0.01;
variance[2] = 1.0;
variance[3] = 0.01;

// THE SUPER-GUESSER 2000
double best = least_square_fit(size,x,y,params);
double guess_params[NUM_PARAMETERS];
double test_var[NUM_PARAMETERS];
double current;
srand(time(NULL));

for(i=0 ; i<NUM_PARAMETERS ; i++)
    test_var[i] = variance[i];

while(1)
{
    //make a guess around the current best
    for(i=0 ; i<NUM_PARAMETERS ; i++)
        guess_params[i] = params[i] + get_rand()*variance[i];

    if(least_square_fit(size,x,y,guess_params) < best)
    {
        best = least_square_fit(size,x,y,guess_params);

        //set the new params and reset the variance
        for(i=0 ; i<NUM_PARAMETERS ; i++)
        {
            params[i] = guess_params[i];
            test_var[i] = variance[i];
        }

        cout << "new best guess is " << best << " at ";
        for(i=0 ; i<NUM_PARAMETERS ; i++)
            cout << params[i] << " ";
    }
}

```

```

        cout << endl;

        ofstream fout("fit.out");
        for(i=0 ; i<200 ; i++)
        {
            double x0 = x[0] + (x[size-1] - x[0])*(double)i/
199.0;
            fout << x0 << " " << fit_function(x0,params) <<
endl;
        }
        fout.close();
    }
    else
    {
        for(i=0 ; i<NUM_PARAMETERS ; i++)
            test_var[i] *= 1.1;
    }
}

return 1;
}

```

## Appendix C:

### **OBJECTIVE**

#### **1. CONTROL OF DEBRIS RELEASED DURING NORMAL OPERATIONS**

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Programs and projects will assess and limit the amount of debris released in a planned manner during normal operations.

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### **MITIGATION STANDARD PRACTICES**

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- 1-1. *In all operational orbit regimes:* Spacecraft and upper stages should be designed to eliminate or minimize debris released during normal operations. Each instance of planned release of debris larger than 5 mm in any dimension that remains on orbit for more than 25 years should be evaluated and justified on the basis of cost effectiveness and mission requirements.

## OBJECTIVE

### 3. SELECTION OF SAFE FLIGHT PROFILE AND OPERATIONAL CONFIGURATION

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Programs and projects will assess and limit the probability of operating space systems becoming a source of debris by collisions with man-made objects or meteoroids.

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## MITIGATION STANDARD PRACTICES

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- 3-1. *Collision with large objects during orbital lifetime:* In developing the design and mission profile for a spacecraft or upper stage, a program will estimate and limit the probability of collision with known objects during orbital lifetime.
- 3-2. *Collision with small debris during mission operations:* Spacecraft design will consider and, consistent with cost effectiveness, limit the probability that collisions with debris smaller than 1 cm diameter will cause loss of control to prevent post-mission disposal.
- 3-3. *Tether systems* will be uniquely analyzed for both intact and severed conditions.

## OBJECTIVE

### 4. POSTMISSION DISPOSAL OF SPACE STRUCTURES

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Programs and projects will plan for, consistent with mission requirements, cost effective disposal procedures for launch vehicle components, upper stages, spacecraft, and other payloads at the end of mission life to minimize impact on future space operations.

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## MITIGATION STANDARD PRACTICES

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4-1. *Disposal for final mission orbits:* A spacecraft or upper stage may be disposed of by one of three methods:

- a. Atmospheric reentry option: Leave the structure in an orbit in which, using conservative projections for solar activity, atmospheric drag will limit the lifetime to no longer than 25 years after completion of mission. If drag enhancement devices are to be used to reduce the orbit lifetime, it should be demonstrated that such devices will significantly reduce the area-time product of the system or will not cause spacecraft or large debris to fragment if a collision occurs while the system is decaying from orbit. If a space structure is to be disposed of by reentry into the Earth's atmosphere, the risk of human casualty will be less than 1 in 10,000.
- b. Maneuvering to a storage orbit: At end of life the structure may be relocated to one of the following storage regimes:
  - I. Between LEO and MEO: Maneuver to an orbit with perigee altitude above 2000 km and apogee altitude below 19,700 km (500 km below semi-synchronous altitude)
  - II. Between MEO and GEO: Maneuver to an orbit with perigee altitude above 20,700 km and apogee altitude below 35,300 km (approximately 500 km above semi-synchronous altitude and 500 km below synchronous altitude.)
  - III. Above GEO: Maneuver to an orbit with perigee altitude above 36,100 km (approximately 300 km above synchronous altitude)
  - IV. Heliocentric, Earth-escape: Maneuver to remove the structure from Earth orbit, into a heliocentric orbit.

Because of fuel gauging uncertainties near the end of mission, a program should use a maneuver strategy that reduces the risk of leaving the structure near an operational orbit regime.

- c. Direct retrieval: Retrieve the structure and remove it from orbit as soon as practical after completion of mission.

4-2. *Tether systems* will be uniquely analyzed for both intact and severed conditions when performing trade-offs between alternative disposal strategies.

# Appendix D:

# Launch	Launch Date (UTC)	COSPAR	PL Name	Orig PL Name	SATCAT	LV Type	LV S/N	Site	Ref			
1957 ALP	1957 Oct 4	1928:34	1957 ALP 2	PS-1	S00002	NII-88	Sputnik 8K71PS	No. 1PS	NIIP-5	LC1	Energiya	
1957 BET	1957 Nov 3	0230:42	1957 BET 1	PS-2	S00003	NII-88	Sputnik 8K71PS	No. 2PS	NIIP-5	LC1	Grahn-WWW	
1957-F01	1957 Dec 6	1644:35	1957-F01	Vanguard	F00002	NRL	Vanguard	TV-3	CC	LC18A	Vang-ER9948	
1958 ALP	1958 Feb 1	0347:56	1958 ALP	Explorer 1	S00004	ABMA/JPL	Jupiter C	RS-29	CC	LC26A	JunoFam	
1958-F01	1958 Feb 5	0733	1958-F01	Vanguard	F00004	NRL	Vanguard	TV-3BU	CC	LC18A	Vang-ER9955	
1958-F02	1958 Mar 5	1827:57	1958-F02	Explorer 2	F00006	ABMA/JPL	Jupiter C	RS/CC-26	CC	LC26A	JunoFam	
1958 BET	1958 Mar 17	1215:41	1958 BET 2	Vanguard 1	S00005	NRL	Vanguard	TV-4	CC	LC18A	SP-4202	
1958 GAM	1958 Mar 26	1738:03	1958 GAM	Explorer 3	S00006	ABMA/JPL	Jupiter C	RS-24	CC	LC5	JunoFam	
1958-F03	1958 Apr 27	0901	1958-F03	[ISZ]	F00008	NII-88	Sputnik 8A91	BL-2	NIIP-5	LC1	NezavB	
1958-F04	1958 Apr 29	0253:00	1958-F04	Vanguard	F00010	NRL	Vanguard	TV-5	CC	LC18A	Vang-ER10300	
1958 DEL	1958 May 15	0700:35	1958 DEL 2	3-y Sovetskiy ISZ	S00008	NII-88	Sputnik 8A91	BL-1	NIIP-5	LC1	NezavB	
1958-F05	1958 May 28	0346:20	1958-F05	Vanguard	F00012	NRL	Vanguard	SLV-1	CC	LC18A	Vang-ER10301	
1958-F06	1958 Jun 26	0500:52	1958-F06	Vanguard	F00014	NRL	Vanguard	SLV-2	CC	LC18A	Vang-ER10302	
1958-F07	1958 Jul 25		1958-F07	NOTS 1	F00017	NOTS	Project Pilot	1	F4D-1 747,NOTS		R NOTS	
1958 EPS	1958 Jul 26	1500:57	1958 EPS	Explorer 4	S00009	ABMA/JPL	Jupiter C	RS/CC-44	CC	LC5	JunoFam	
1958-F08	1958 Aug 12		1958-F08	NOTS 2	F00020	NOTS	Project Pilot	2	F4D-1 747,NOTS		R NOTS	
1958-F09	1958 Aug 17	1218	1958-F09	Pioneer	F00022	AFBMD	Thor Able I	127	CC	LC17A	KHR-1	
1958-F10	1958 Aug 22		1958-F10	NOTS 3	F00026	NOTS	Project Pilot	3	F4D-1 747,NOTS		R NOTS	
1958-F11	1958 Aug 24	0617:22	1958-F11	Explorer 5	F00028	ABMA/JPL	Jupiter C	RS/CC-47	CC	LC5	JunoFam	
1958-F12	1958 Aug 25		1958-F12	NOTS 4	F00031	NOTS	Project Pilot	4	F4D-1 747,NOTS		R NOTS	
1958-F13	1958 Aug 26		1958-F13	NOTS 5	F00034	NOTS	Project Pilot	5	F4D-1 747,NOTS		R NOTS	
1958-F14	1958 Aug 28		1958-F14	NOTS 6	F00037	NOTS	Project Pilot	6	F4D-1 747,NOTS		R NOTS	
1958-F15	1958 Sep 23		1958-F15	[AMS Luna]	F00039	NII-88	Vostok-L 8K72	BL-3	NIIP-5	LC1	AVMNLJ	
1958-F16	1958 Sep 26	1538	1958-F16	Vanguard	F00041	NRL	Vanguard	SLV-3	CC	LC18A	Vang-ER10303	
1958 ETA	1958 Oct 11	0842	1958 ETA	Pioneer 1	S00110	NASA/AFBMD	Thor Able I	130	CC	LC17A	KHR-1	
1958-F17	1958 Oct 11		1958-F17	[AMS Luna]	F00043	NII-88	Vostok-L 8K72	BL-4	NIIP-5	LC1	AVMNLJ	
1958-F18	1958 Oct 23	0321:04	1958-F18	Beacon	F00047	NASA LaRC	Jupiter C	RS/CC-49	CC	LC5	JPL-POM-59-10	
1958-F19	1958 Nov 8	0730	1958-F19	Pioneer 2	F00049	NASA/AFBMD	Thor Able I	129	CC	LC17A	KHR-1	
1958-F20	1958 Dec 4		1958-F20	[AMS Luna]	F00052	NII-88	Vostok-L 8K72	BL-5	NIIP-5	LC1	AVMNLJ	
1958 THE	1958 Dec 6	0544:52	1958 THE	Pioneer 3	S00111	ABMA	Juno II	AM-11	CC	LC5	JPL32-31-2	
1958 ZET	1958 Dec 18	2302	1958 ZET	SCORE	S00010	USA SRDL	Atlas B	10B	CC	LC11	JCM	
1959 MU	1959 Jan 2	1641:21	1959 MU 1	AMS Luna-1	S00112	NII-88	Vostok-L 8K72	BL-6	NIIP-5	LC1	Energiya	
1959-E01	1959 Jan 21			Discoverer		ARPA/CIA	Thor Agena A	160	V	75-3-4	NRO3E24	
1959 ALP	1959 Feb 17	1555	1959 ALP 1	Vanguard II	S00011	NASA BSC	Vanguard	SLV-4	CC	LC18A	Vang-ER10304	
1959 BET	1959 Feb 28	2149:16	1959 BET	Discoverer 1	S00013	ARPA/CIA	Thor Agena A	163	V	75-3-4	NRO2D4	
1959 NU	1959 Mar 3	0510:56	1959 NU 1	Pioneer 4	S00113	ABMA	Juno II	AM-14	CC	LC5	JPL32-31-2	
1959 GAM	1959 Apr 13	2118:39	1959 GAM	Discoverer 2	S00014	ARPA/CIA	Thor Agena A	170	V	75-3-4	NRO3E24	
1959-F01	1959 Apr 14	0249:46	1959-F01	Vanguard	F00054	NASA BSC	Vanguard	SLV-5	CC	LC18A	Vang-ER10589	
1959-F02	1959 Jun 3	2009:20	1959-F02	30-inch Sphere	F00056	NASA LaRC						
1959-F06	1959 Jun 18	0808	1959-F06	Discoverer 3	F00058	ARPA/CIA	Thor Agena A	174	V	75-3-4	NRO3E24	
1959-F03	1959 Jun 22	2016:09	1959-F03	SRV	F00060	ARPA/CIA						
1959-F04	1959 Jun 25	2247:45	1959-F04	[AMS Luna]	F00062	NII-88	Vostok-L 8K72	11-7	NIIP-5	LC1	NezavB	
1959-F05	1959 Jun 25	2247:45	1959-F04	Vanguard	F00064	NASA GSFC	Vanguard	SLV-6	CC	LC18A	Vang-ER-SLV6	
1959-F05	1959 Jul 16	1737:03	1959-F05	Discoverer 4	F00066	ARPA/CIA	Thor Agena A	179	V	75-3-5	NRO3E3	
1959 DEL	1959 Aug 7	1424:20	1959 DEL 1	CORONA 9001	F00068	ARPA/CIA						
1959 EPS	1959 Aug 13	1900:08	1959 EPS 1	SRV 102	F00070	NASA GSFC	Juno II	AM-16	CC	LC5	JPL32-31-3	
1959-F07	1959 Aug 15	0031:00	1959-F07	NASA S-1	S00015	NASA GSFC	Thor Able III	134	CC	LC17A	RAE/PSC	
1959 ZET	1959 Aug 19	1924:44	1959 ZET	Explorer 6	S00018	ARPA/CIA	Thor Agena A	192	V	75-3-4	NRO3E24	
1959 XI	1959 Sep 12	0639:42	1959 XI 1	Discoverer 5	S00026	ARPA/CIA						
1959-F08	1959 Sep 17		1959-F08	SRV 111	F00072	NASA LaRC	Juno II	AM-19B	CC	LC26B	JPL32-31-3	
1959 ETA	1959 Sep 18	0520:07	1959 ETA	Beacon	S00019	ARPA/CIA	Thor Agena A	200	V	75-3-5	NRO3E24	
1959-E02	1959 Sep 24			Discoverer 6	A00017	ARPA/CIA						
1959 THE	1959 Oct 4	0043:39	1959 THE 1	SRV 105	S00114	NII-88	Vostok-L 8K72	11-7B	NIIP-5	LC1	JBIS51-231	
1959 IOT	1959 Oct 13	1530:04	1959 IOT 1	AMS Luna-2	F00074	USN	Thor Able II	136	CC	LC17A	Thor	
AM16A				Transit 1A	S00020	NASA GSFC	Vanguard	SLV-7	CC	LC18A	Vang-ER-SLV7	
1959 KAP	1959 Nov 7	2028:41	1959 KAP	Vanguard III			Atlas C Able	9C	CC	LC12	AE1915	
1959 LAM	1959 Nov 20	1925:24	1959 LAM	AMS Luna-3	S00021	NII-88	Vostok-L 8K72	11-8	NIIP-5	LC1	NezavB	
1959-F09	1959 Nov 26	0726	1959-F09	Explorer 7	S00022	NASA GSFC	Juno II	AM-19A	CC	LC5	FOM-JUNO-	
1960-F01	1960 Feb 4	1851:45	1960-F01	Discoverer 7	S00024	ARPA/CIA	Thor Agena A	206	V	75-3-4	NRO3E24	
1960-F02	1960 Feb 19	2015:14	1960-F02	SRV 109	A00021	ARPA/CIA						
1960-F03	1960 Feb 26	1725	1960-F03	Discoverer 8	S00025	ARPA/CIA	Thor Agena A	212	V	75-3-5	NRO3E24	
1960 ALP	1960 Mar 11	1300	1960 ALP 1	SRV 107	A00024	ARPA/CIA						
1960-F04	1960 Mar 23	1335:11	1960-F04	SRV 107	F00078	NASA/AFBMD	Atlas Able	20D	CC	LC14	KHR-1	
1960 BET	1960 Apr 1	1140:09	1960 BET 1	P-3	F00080	ARPA/CIA	Thor Agena A	218	V	75-3-4	NRO3E24	
1960 GAM	1960 Apr 13	1202:36	1960 GAM 2	Discoverer 9	F00082	ARPA/CIA						
1960-U01	1960 Apr 15	1506:45	1960-U01	SRV 113	F00084	AFBMD/CIA	Thor Agena A	223	V	75-3-5	NRO3E24	
				Discoverer 10	F00086	AFBMD/CIA						
				SRV 110	F00088	USAF	Atlas Agena A	29D	CC	LC14	JCM	
				SRV 110	S00027	NASA GSFC	Thor Able IV	219	CC	LC17A	KHR-1	
				Midast 1	F00091	NASA MSFC	Juno II	AM-19C	CC	LC26B	ABMA	
				Pioneer 5	S00028	USAF	Thor Able II	148	CC	LC17A	NASA-TR-R131	
				NASA S-46	S00029	NASA GSFC						
				Altair X-248	S00031	USN	Thor Ablestar	257	AB002?	CC	LC17B	RAE/PSC
				Altair 1	S00033	USN						
				Tiros 1	A05017	NII-88	Vostok-L 8K72	L1-9	NIIP-5	LC1	NezavB	
				Transit 1B								
				Dummy subsatellite								
				[Luna-4]								



1960 DEL	1960 Apr 15 2030:37	1960 DEL	Discoverer 11	CORONA 9008	S00032 AFBMD/CIA	Thor Agena A	234	V	75-3-5	NRO3E24
1960-F06	1960 Apr 16 1607:41	1960-F06	SRV 103	ERV	A00029 AFBMD/CIA					
1960-F07	1960 May 13 0916:05	1960-F07	[Luna-4]	E-3 No. 2	F00095 NII-88	Vostok-L 8K72	L1-9A	NIIP-5	LC1	NezavB
1960 EPS	1960 May 15 0000:05	1960 EPS 3	Echo	A-10 Echo	F00098 NASA LaRC	Thor Delta	144/D1	CC	LC17A	TR-1022
1960 ZET	1960 May 24 1736:46	1960 ZET 1	Korabl'-Sputnik	Vostok-1P	S00036 NII-88	Vostok 8K72	L1-11	NIIP-5	LC1	VSA074
1960 ETA	1960 Jun 22 0554	1960 ETA 1	Midas 2	Midas 2	S00043 USAF	Atlas Agena A	45D	CC	LC14	RAE/PSC
		1960 ETA 2	Transit 2A	Transit 2A	S00045 USN	Thor Ablestar	281 AB003?	CC	LC17B	JCM
			SRV	GRAB 1	S00046 USN					
1960-F08	1960 Jun 29 2200:44	1960-F08	Discoverer 12	CORONA R&D	F00101 AFBMD/CIA	Thor Agena A	160	V	75-3-4	NRO3E24
		1960-F08	SRV	ERV	F00103 AFBMD/CIA					
1960-F09	1960 Jul 28 0931	1960-F09	[Korabl'-Sputnik]	Vostok-1 No. 1	F00105 NII-88	Vostok 8K72	L1-10	NIIP-5	LC1	NezavB
1960 THE	1960 Aug 10 2037:54	1960 THE	Discoverer 13	CORONA R&D	S00048 AFBMD/CIA	Thor Agena A	231	V	75-3-5	NRO3E24
		1960 THE	SRV	ERV	A00033 AFBMD/CIA					
1960 IOT	1960 Aug 12 0939:43	1960 IOT 1	Echo 1	A-11	S00049 NASA LaRC	Thor Delta	270/D2	CC	LC17A	TR-1022
1960 KAP	1960 Aug 18 1957:08	1960 KAP	Discoverer 14	CORONA 9009	S00054 AFBMD/CIA	Thor Agena A	237	V	75-3-4	NRO3E24
		1960 KAP	SRV 101	SRV	A00036 AFBMD/CIA					
1960-F10	1960 Aug 18 1958	1960-F10	Courier 1A	Courier 1A	F00108 USA/ARPA	Thor Ablestar	262 AB004?	CC	LC17B	JCM
1960 LAM	1960 Aug 19 0844:06	1960 LAM 1	Korabl'-Sputnik-2	Vostok-1 No. 2	S00055 NII-88	Vostok 8K72	L1-12	NIIP-5	LC1	NezavB
1960 MU	1960 Sep 13 2214	1960 MU	Discoverer 15	CORONA 9010	S00057 AFBMD/CIA	Thor Agena A	246	V	75-3-5	VCR
		1960 MU	SRV 106	SRV	A00040 AFBMD/CIA					
1960-F11	1960 Sep 25 1513	1960-F11	P-30	Able VA	F00112 NASA/AFBMD	Atlas Able	80D	CC	LC12	KHR-1
1960 NU	1960 Oct 4 1750	1960 NU 1	Courier 1B	Courier 1B	S00058 USA/ARPA	Thor Ablestar	293 AB005	CC	LC17B	MR601010-40
1960-F12	1960 Oct 10 1427:49	1960-F12	[AMS Mars]	1M No. 1	F00116 NII-88	Molniya 8K78	L1-4M	NIIP-5	LC1	KIAM
1960-F13	1960 Oct 11 2033	1960-F13	Samos 1	SAMOS E-1	F00118 USAF	Atlas Agena A	57D	PA	LC1-1	VCR
1960-F14	1960 Oct 14 1351:03	1960-F14	[AMS Mars]	1M No. 2	F00122 NII-88	Molniya 8K78	L1-5M	NIIP-5	LC1	KIAM
1960-F15	1960 Oct 26 2026	1960-F15	Discoverer 16	CORONA 9011	F00124 AFBMD/CIA	Thor Agena B	253	V	75-3-4	VCR
		1960-F15	SRV 506	SRV	F00126 AFBMD/CIA					
1960 XI	1960 Nov 3 0523:10	1960 XI 1	Explorer 8	NASA S-30	S00060 NASA GSFC	Juno II	AM-19D	CC	LC26B	ABMA
1960 OMI	1960 Nov 12 2043	1960 OMI	Discoverer 17	CORONA 9012	S00061 AFBMD/CIA	Thor Agena B	297	V	75-3-5	VCR
		1960 OMI	SRV 507	SRV	A00043 AFBMD/CIA					
1960 PI	1960 Nov 23 1113:03	1960 PI 1	Tiros 2	Tiros B (A-2)	S00063 NASA GSFC	Thor Delta	245/D3	CC	LC17A	TR-1022
1960-F16	1960 Nov 30 1950	1960-F16	Transit 3A	Transit 3A	F00128 USN	Thor Ablestar	283 AB006	CC	LC17B	JCM
		1960-F16	SR 2	GRAB 2	F00129 USN					
1960 RHO	1960 Dec 1 0730:04	1960 RHO 1	Korabl'-Sputnik-3	Vostok-1 No. 3	S00065 NII-88	Vostok 8K72	L1-13	NIIP-5	LC1	NezavB
1960-F17	1960 Dec 4 2114	1960-F17	NASA S-56	NASA S-56	F00132 NASA LaRC	Scout X-1	ST-3	WI	LA3	JCM
1960 SIG	1960 Dec 7 2020:58	1960 SIG	Discoverer 18	CORONA 9013	S00067 AFBMD/CIA	Thor Agena B	296	V	75-3-4	VCR
		1960 SIG	SRV 508	SRV	A00047 AFBMD/CIA					
1960-F18	1960 Dec 15 0910	1960-F18	P-31	Able VB	F00136 NASA/AFBMD	Atlas Able	91D	CC	LC12	KHR-1
1960 TAU	1960 Dec 20 2032	1960 TAU	Discoverer 19	CORONA RM-1	S00068 AFBMD/ARPA	Thor Agena B	258	V	75-3-5	VCR
1960-F19	1960 Dec 22 0745:19	1960-F19	[Korabl'-Sputnik]	Vostok-1 No. 4	F00138 NII-88	Vostok 8K72K	L1-13A	NIIP-5	LC1	NezavB
1961 ALP	1961 Jan 31 2021:19	1961 ALP 1	Samos 2	SAMOS E-1	S00070 USAF	Atlas Agena A	70D	PA	LC1-1	VCR
1961 BET	1961 Feb 4 0118:03	1961 BET 1	Tyazholyi Sputnik	1VA No. 1	S00071 NII-88	Molniya 8K78	L1-7	NIIP-5	LC1	NK9701-29
1961 GAM	1961 Feb 12 0034:36	1961 GAM 1	AMS Venera	1VA No. 2	S00080 NII-88	Molniya 8K78	L1-6B	NIIP-5	LC1	NezavB
1961 DEL	1961 Feb 16 1305	1961 DEL 1	Explorer 9	NASA S-56A	S00081 NASA LaRC	Scout X-1	ST-4	WI	LA3	NYT610217
1961 EPS	1961 Feb 17 2025	1961 EPS 1	Discoverer 20	CORONA 9014A (ARGON)	S00083 AFBMD/CIA	Thor Agena B	298	V	75-3-4	VCR
		1961 EPS 4	SRV 520	SRV	S00090 AFBMD/CIA					
1961 ZET	1961 Feb 18 2258	1961 ZET	Discoverer 21	CORONA RM-2	S00084 AFBMD/ARPA	Thor Agena B	261	V	75-3-5	VCR
1961 ETA	1961 Feb 22 0345	1961 ETA	Transit 3B	Transit 3B	S00087 USN	Thor Ablestar	313 AB007	CC	LC17B	JCM
		1961 ETA	Lofti	Lofti	A00055 USN					
1961-F01	1961 Feb 25 0013:16	1961-F01	NASA S-45	NASA S-45	F00141 NASA GSFC	Juno II	AM-19F	CC	LC26B	ABMA Memo
1961 THE	1961 Mar 9 0629:00	1961 THE 1	Korabl'-Sputnik-4	Vostok-3 No. 1	S00091 NII-88	Vostok 8K72K	E103-14	NIIP-5	LC1	NezavB
1961 IOT	1961 Mar 25 0554:00	1961 IOT 1	Korabl'-Sputnik-5	Vostok-3 No. 2	S00095 NII-88	Vostok 8K72K	E103-15	NIIP-5	LC1	NezavB
1961 KAP	1961 Mar 25 1517:04	1961 KAP	Explorer 10	P-14	S00098 NASA GSFC	Thor Delta	295/D4	CC	LC17A	TR-1022
1961-F02	1961 Mar 30 2034:43	1961-F02	Discoverer 22	CORONA 9015	F00143 AFBMD/CIA	Thor Agena B	300	V	75-3-4	VCR
		1961-F02	SRV 509	SRV	F00145 AFBMD/CIA					
1961 LAM	1961 Apr 8 1921	1961 LAM 1	Discoverer 23	CORONA 9016A (ARGON)	S00100 AFBMD/CIA	Thor Agena B	307	V	75-3-5	VCR
		1961 LAM 2	SRV 521	SRV	S00102 AFBMD/CIA					
1961 MU	1961 Apr 12 0607:00	1961 MU 1	Vostok	Vostok-3A No. 3	S00103 NII-88	Vostok 8K72K	E103-16	NIIP-5	LC1	Energiya
1961-F03	1961 Apr 25 1615	1961-F03	Mercury MA-3	Mercury SC8	F00146 NASA STG	Atlas D	100D	CC	LC14	KHR-1
1961 NU	1961 Apr 27 1416:38	1961 NU 1	Explorer 11	NASA S-15	S00107 NASA GSFC	Juno II	AM-19E	CC	LC26B	MTP-LOD-OIR-
		1961-F04	NASA S-45A	NASA S-45A	F00148 NASA GSFC	Juno II	AM-19G	CC	LC26B	ABMA
1961-F05	1961 Jun 8 2116	1961-F05	Discoverer 24	CORONA 9018A (ARGON)	F00150 CIA	Thor Agena B	302	V	75-3-4	VCR
		1961-F05	SRV 541	SRV	F00152 AFBMD/CIA					
1961 XI	1961 Jun 16 2302	1961 XI 1	Discoverer 25	CORONA 9017	S00108 AFBMD/CIA	Thor Agena B	303	V	75-1-1	VCR
		1961 XI	SRV 510	SRV	A00064 AFBMD/CIA					
1961 OMI	1961 Jun 29 0422	1961 OMI 1	Transit 4A	Transit 4A	S00116 USN	Thor Ablestar	315 AB008	CC	LC17B	JCM
		1961 OMI 2	Solrad 3	GRAB 3	A00065 USN					
		1961 OMI 2	Injun	Injun	S00117 USN					
1961-F06	1961 Jun 30 1709	1961-F06	NASA S-55	NASA S-55	F00154 NASA LaRC	Scout X-1	ST-5	WI	LA3	JCM
1961 PI	1961 Jul 7 2329	1961 PI	Discoverer 26	CORONA 9019	S00160 AFBMD/CIA	Thor Agena B	308	V	75-3-5	VCR
		1961 PI	SRV 511	SRV	A00068 AFBMD/CIA					
1961 RHO	1961 Jul 12 1025:06	1961 RHO 1	Tiros 3	Tiros C (A-3)	S00162 NASA GSFC	Thor Delta	286/D5	CC	LC17A	TR-1022
1961 SIG	1961 Jul 12 1511	1961 SIG 1	Midas 3	Midas 3	S00163 USAF	Atlas Agena B	97D	PA	LC1-2	VCR
1961-F07	1961 Jul 21 2235	1961-F07	Discoverer 27	CORONA 9020A (ARGON)	F00156 AFBMD/CIA	Thor Agena B	322	V	75-3-4	VCR
		1961-F07	SRV 524	SRV	F00158 AFBMD/CIA					
1961-F08	1961 Aug 4 0001	1961-F08	Discoverer 28	CORONA 9021	F00160 AFBMD/CIA	Thor Agena B	309	V	75-1-1	VCR
		1961-F08	SRV 512	SRV	F00162 AFBMD/CIA					
1961 TAU	1961 Aug 6 0600	1961 TAU 1	Vostok-2	Vostok-3A No. 4	S00168 NII-88	Vostok 8K72K	E103-17	NIIP-5	LC1	VSA074
1961 UPS	1961 Aug 16 0321:05	1961 UPS	Explorer 12	S-3 (EPE-A)	S00170 NASA GSFC	Thor Delta	312/D6	CC	LC17A	TR-1022
1961 PHI	1961 Aug 23 1004	1961 PHI 1	Ranger 1	NASA P-32 (RA-1)	S00173 NASA/JPL	Atlas Agena B	111D (AA1)	CC	LC12	KHR-1
1961 CHI	1961 Aug 25 1829	1961 CHI	Explorer 13	NASA S-55A	S00180 NASA LaRC	Scout X-1	ST-6	WI	LA3	JCM

1961 PSI	1961 Aug 30 2000	1961 PSI	Discoverer 29	CORONA 9023	S00181 NRO/CIA	Thor Agena B	323	V	75-3-4	VCR	
1961-F09	1961 Sep 9 1928	1961 PSI	SRV 554	SRV	A00075 NRO/CIA						
1961 OME	1961 Sep 12 1959	1961-F09	Samos 3	SAMOS E-2	F00164 USAF	Atlas Agena B	106D	PA	LC1-1	VCR	
		1961 OME 1	Discoverer 30	CORONA 9022	S00182 NRO/CIA	Thor Agena B	310	V	75-3-5	VCR	
		1961 OME	SRV 551	SRV	A00079 NRO/CIA						
1961 A ALP	1961 Sep 13 1404	1961 A ALP 1	Mercury MA-4	Mercury SC8A	S00183 NASA STG	Atlas D	88D	CC	LC14	KHR-1	
1961 A BET	1961 Sep 17 2100	1961 A BET	Discoverer 31	CORONA 9024	S00186 NRO/CIA	Thor Agena B	324	V	75-1-1	VCR	
		1961 A BET	SRV 552	SRV	A00082 NRO/CIA						
1961 A GAM	1961 Oct 13 1922	1961 A GAM 1	Discoverer 32	CORONA 9025	S00189 NRO/CIA	Thor Agena B	328	V	75-3-4	VCR	
		1961 A GAM	SRV 555	SRV	A00085 NRO/CIA						
1961 A DEL	1961 Oct 21 1353:03	1961 A DEL 1	Midas 4	Midas 4	S00192 USAF	Atlas Agena B	105D	PA	LC1-2	VCR	
		1961 A DEL 3	Westford	Westford	S00194 USAF						
1961-F10	1961 Oct 23 1923	1961-F10	Discoverer 33	CORONA 9026	F00166 NRO/CIA	Thor Agena B	329	V	75-3-5	VCR	
		1961-F10	SRV 513	SRV	F00168 NRO/CIA						
1961-F11	1961 Oct 27 1630	1961-F11	Kosmos	DS-1 No. 1	F00171 MO SSSR	Kosmos 63S1	-	GTsP-4	Mayak-2	AVMDS	
1961-F12	1961 Nov 1 1532	1961-F12	Mercury MS-1	Mercury MS-1	F00173 NASA MSC	Blue Scout II	D-8	CC	LC18B	KHR-1	
1961 A EPS	1961 Nov 5 2000	1961 A EPS 1	Discoverer 34	CORONA 9027	S00197 NRO/CIA	Thor Agena B	330	V	75-1-1	VCR	
		1961 A EPS	SRV 553	SRV	A00089 NRO/CIA						
1961 A ZET	1961 Nov 15 2123	1961 A ZET 1	Discoverer 35	CORONA 9028	S00201 NRO/CIA	Thor Agena B	326	V	75-3-4	VCR	
		1961 A ZET	SRV 523	SRV	A00092 NRO/CIA						
1961 A ETA	1961 Nov 15 2219?	1961 A ETA 1	Transit 4B	Transit 4B	S00202 USN	Thor Ablestar	305	AB009?	CC	LC17B	RAE
		1961 A ETA 2	Traac	Traac	S00205 USN						
1961 A THE	1961 Nov 18 0812	1961 A THE	Ranger 2	NASA P-33 (RA-2)	S00206 NASA/JPL	Atlas Agena B	117D (AA2)	CC	LC12	KHR-1	
1961-F13	1961 Nov 22 2045:47	1961-F13	Samos 4	Samos 4 (E-5)	F00175 AFSMS	Atlas Agena B	108D	PA	LC1-1	VCR	
1961 A IOT	1961 Nov 29 1507:57	1961 A IOT 1	Mercury MA-5	Mercury SC9	S00208 NASA MSC	Atlas D	93D	CC	LC14	SP-39	
1961-F14	1961 Dec 11 0939:02	1961-F14	[Kosmos-1]	Zenit-2 No. 1	F00179 NII-88	Vostok 8K72K	-	NIIP-5	LC1	NK96-10-65	
1961 A KAP	1961 Dec 12 2040	1961 A KAP 1	Discoverer 36	CORONA 9029	S00213 NRO/CIA	Thor Agena B	325	V	75-3-4	VCR	
		1961 A KAP 2	Oscar 1	Oscar 1	S00214 OSCAR						
		1961 A KAP	SRV 525	SRV	A00097 NRO/CIA						
1961-F15	1961 Dec 21 1230	1961-F15	Kosmos	DS-1 No. 2	F00184 MO SSSR	Kosmos 63S1	-	GTsP-4	Mayak-2	AVMDS	
1961 A LAM	1961 Dec 22 1912:33	1961 A LAM 2	Samos 5	Samos 5 (E-5)	S00218 AFSMS	Atlas Agena B	114D	PA	LC1-2	VCR	
1962-F01	1962 Jan 13 2141	1962-F01	Discoverer 37	CORONA 9030	F00186 NRO/CIA	Thor Agena B	327	V	75-3-4	VCR	
		1962-F01	SRV 571	SRV	F00188 NRO/CIA						
1962-F02	1962 Jan 24 0930	1962-F02	SR 4	GRAB 4	F00190 USN	Thor Ablestar	311	AB010	CC	LC17B	FI620405-527
		1962-F02	Lofti 2	Lofti 2	F00191 USN						
		1962-F02	Secor	Secor	F00192 USA ERDL						
		1962-F02	Injun 2	Injun 2	F00193 USN						
		1962-F02	Surcal	Surcal	F00194 USN						
1962 ALP	1962 Jan 26 2030	1962 ALP 1	Ranger 3	NASA P-34 (RA-3)	S00221 NASA/JPL	Atlas Agena B	121D (AA3)	CC	LC12	KHR-1	
		1962 ALP	Ranger Capsule 12	Ranger Capsule 12	A00102 NASA/JPL						
1962 BET	1962 Feb 8 1243:45	1962 BET 1	Tiros 4	Tiros D (A-9)	S00226 NASA GSFC	Thor Delta	317/D7	CC	LC17A	TR-1022	
1962 GAM	1962 Feb 20 1447:39	1962 GAM 1	Friendship Seven (MA-6)	Mercury SC13	S00240 NASA MSC	Atlas D	109D	CC	LC14	KHR-1	
1962 DEL	1962 Feb 21 1844	1962 DEL	FTV 2301	Ferret 1	S00242 USAF/NSA	Thor Agena B	332	V	75-3-5	VCR	
1962 EPS	1962 Feb 27 1939	1962 EPS 1	Discoverer 38	CORONA 9031	S00247 NRO/CIA	Thor Agena B	241	V	75-3-4	VCR	
		1962 EPS	SRV 581	SRV	A00107 NRO/CIA						
1962 ZET	1962 Mar 7 1606:18	1962 ZET 1	OSO 1	S-16 (OSO A)	S00255 NASA GSFC	Thor Delta	301/D8	CC	LC17A	TR-1022	
1962 ETA	1962 Mar 7 2210:31	1962 ETA 3	Samos 6	Samos 6 (E-5)	S00259 AFSMS	Atlas Agena B	112D	PA	LC1-2	VCR	
1962 THE	1962 Mar 16 1159	1962 THE 1	Kosmos-1	DS-2 No. 1	S00266 MO SSSR	Kosmos 63S1	6LK	GTsP-4	Mayak-2	AVMDS	
1962 IOT	1962 Apr 6 1715	1962 IOT 1	Kosmos-2	1MS No. 1	S00269 MO SSSR	Kosmos 63S1	5LK	GTsP-4	Mayak-2	NK9707-75	
1962 KAP	1962 Apr 9 1504:48	1962 KAP 1	Midas 5	Midas 5	S00271 USAF	Atlas Agena B	1107D	PA	LC1-2	VCR	
		1962 KAP 2	West Ford Drag	West Ford Drag Experiment	S00272 USAF						
1962 LAM	1962 Apr 18 0054	1962 LAM 1	Discoverer 39	CORONA 9032	S00276 NRO/CIA	Thor Agena B	331	V	75-3-5	VCR	
		1962 LAM	SRV 584	SRV	A00112 NRO/CIA						
1962 MU	1962 Apr 23 2050	1962 MU 1	Ranger 4	Ranger 4	S00280 NASA/JPL	Atlas Agena B	133D (AA4)	CC	LC12	KHR-1	
		1962 MU	Ranger Capsule 14	Ranger Capsule 14	A00114 NASA/JPL						
1962 NU	1962 Apr 24 0400	1962 NU 1	Kosmos-3	2MS No. 1	S00281 MO SSSR	Kosmos 63S1	4LK	GTsP-4	Mayak-2	NK9709-63	
1962-F03	1962 Apr 26	1962-F03	SR 4B	GRAB 4B	F00196 NRL	Scout X-2	S111	PA	LC-D	VAFB	
1962 XI	1962 Apr 26 1002	1962 XI 1	Kosmos-4	Zenit-2 No. 2	S00287 NII-88	Vostok 8K72K	-	NIIP-5	LC1	NK96-10-65	
1962 OMI	1962 Apr 26 1800:16	1962 OMI 1	Ariel 1	UK 1 (S-51)	S00285 BNCSR	Thor Delta	320/D9	CC	LC17A	TR-1022	
1962 PI	1962 Apr 26 1856:08	1962 PI	FTV 2401	APP-201 PVP 851	S00286 AFSMS	Atlas Agena B	118D	PA	LC1-1	VCR	
		1962 PI	FTV 2401 RV	E-6 RV	A00116 AFSMS						
1962 RHO	1962 Apr 29 0030	1962 RHO 1	FTV 1125	CORONA 9033	S00290 NRO/CIA	Thor Agena B	333	V	75-3-4	VCR	
		1962 RHO	SRV 586	SRV	A00120 NRO/CIA						
1962-F04	1962 May 10 1207	1962-F04	ANNA 1A	ANNA 1A	F00198 USN	Thor Ablestar	314	AB011	CC	LC17B	JCM
1962 SIG	1962 May 15 1936	1962 SIG 1	FTV 1126	CORONA 9034A (ARGON)	S00292 NRO/CIA	Thor Agena B	334	V	75-3-5	VCR	
		1962 SIG	SRV 582	SRV	A00123 NRO/CIA						
1962-F05	1962 May 24	1962-F05	FTV 3501	P35-1	F00200 USAF	Scout X-2M	S112	PA	LC-D	VAFB	
1962 TAU	1962 May 24 1245:16	1962 TAU 1	Aurora Seven (MA-7)	Mercury SC18	S00295 NASA MSC	Atlas D	107D	CC	LC14	KHR-1	
		1962 TAU	MA-7 Balloon Subsatellite	MA-7 Balloon Subsatellite	A00125 NASA LaRC						
1962 UPS	1962 May 28 0300	1962 UPS 1	Kosmos-5	2MS No. 2	S00297 MO SSSR	Kosmos 63S1	3LK	GTsP-4	Mayak-2	NK9711-45	
1962 PHI	1962 May 30 0100	1962 PHI 1	FTV 1128	CORONA 9035	S00302 NRO/CIA	Thor Agena B	336	V	75-1-1	VCR	
		1962 PHI	SRV 585	SRV	A00128 NRO/CIA						
1962-F06	1962 Jun 1 0938	1962-F06	[Kosmos-6]	Zenit-2 No. 3	F00202 NII-88	Vostok 8A92	E15000-01	NIIP-5	LC1	NK96-10-65	
1962 CHI	1962 Jun 2 0031	1962 CHI 1	FTV 1127	CORONA 9036	S00304 NRO/CIA	Thor Agena B	335	V	75-3-4	VCR	
		1962 CHI 2	Oscar 2	Oscar 2	S00305 OSCAR						
		1962 CHI	SRV 583	SRV	A00131 NRO/CIA						
1962 PSI	1962 Jun 17 1814:18	1962 PSI	FTV 2402	APP-201 PVP 852	S00307 AFSMS	Atlas Agena B	115D	PA	LC1-1	VCR	
		1962 PSI	FTV 2402 RV	E-6 RV	A00133 AFSMS						
1962 OME	1962 Jun 18 2020	1962 OME 1	FTV 2312	Ferret 2	S00308 USAF/NSA	Thor Agena B	343	V	75-3-5	VCR	
1962 A ALP	1962 Jun 19 1219:01	1962 A ALP 1	Tiros 5	Tiros E (A-50)	S00309 NASA GSFC	Thor Delta	321/D10	CC	LC17A	TR-1022	
1962 A BET	1962 Jun 23 0030	1962 A BET	FTV 1129	CORONA 9037	S00315 NRO/CIA	Thor Agena B	339	V	75-3-4	VCR	
		1962 A BET	SRV 591	SRV	A00137 NRO/CIA						

1962 A GAM	1962 Jun 28 0109	1962 A GAM	FTV 1151	CORONA 9038	S00316 NRO/CIA	Thor Agena D	340	V	75-1-1	VCR
1962 A DEL	1962 Jun 30 1600	1962 A GAM	SRV 592	SRV	A00140 NRO/CIA					
1962 A EPS	1962 Jul 10 0835:05	1962 A DEL 1	Kosmos-6	DS-P1 No. 1	S00338 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	AVMDS
1962 A ZET	1962 Jul 18 2051:20	1962 A EPS 1	Telstar 1	Telstar 1	S00340 AT&T	Thor Delta	316/D11	CC	LC17B	TR-1022
		1962 A ZET 1	FTV 2403	APP-201 PVP 853	S00342 AFSMS	Atlas Agena B	120D	PA	LC1-1	VCR
		1962 A ZET 2	FTV 2013 RV	E-6 RV	S00343 AFSMS					
1962 A ETA	1962 Jul 21 0056	1962 A ETA	FTV 1130	CORONA 9039	S00344 NRO/CIA	Thor Agena B	342	V	75-3-5	VCR
		1962 A ETA	SRV 593	SRV	A00144 NRO/CIA					
1962-F07	1962 Jul 22 0921:23	1962-F07	Mariner 1	Mariner R-1	F00205 NASA/JPL	Atlas Agena B	145D (AA5)	CC	LC12	KHR-1
1962 A THE	1962 Jul 28 0030	1962 A THE	FTV 1131	CORONA 9040	S00345 NRO/CIA	Thor Agena B	347	V	75-3-4	VCR
		1962 A THE	SRV 594	SRV	A00148 NRO/CIA					
1962 A IOT	1962 Jul 28 0918:31	1962 A IOT 1	Kosmos-7	Zenit-2 No. 4	S00346 NII-88	Vostok 8A92	T15000-07	NIIP-5	LC1	NK96-10-65
1962 A KAP	1962 Aug 2 0017	1962 A KAP 1	FTV 1152	CORONA 9041	S00360 NRO/CIA	Thor Agena D	344	V	75-1-1	VCR
		1962 A KAP	SRV 595	SRV	A00153 NRO/CIA					
1962 A LAM	1962 Aug 5 1758:59	1962 A LAM	FTV 2404	APP-201 PVP 854	S00361 AFSMS	Atlas Agena B	124D	PA	LC1-1	VCR
		1962 A LAM	FTV 2404 RV	E-6 RV	A00151 AFSMS					
1962 A MU	1962 Aug 11 0830	1962 A MU 1	Vostok-3	Vostok-3A No. 5	S00363 NII-88	Vostok 8K72K	-	NIIP-5	LC1	VSA074
1962 A NU	1962 Aug 12 0802:17	1962 A NU 1	Vostok-4	Vostok-3A No. 6	S00365 NII-88	Vostok 8K72K	-	NIIP-5	LC1	VSA074
1962 A XI	1962 Aug 18 1500	1962 A XI 1	Kosmos-8	DS-K-8 No. 1	S00367 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	AVMDS
1962 A OMI	1962 Aug 23 1144?	1962 A OMI 1	FTV 3502	P35-2	S00369 USAF	Scout X-2M	S117	PA	LC-D	RAE
1962 A PI	1962 Aug 25 0218:45	1962 A PI 1	Spuskaemiy apparat	2MV-1 No. 1 SA	A00157 NII-88	Molniya 8K78	T103-12	NIIP-5	LC1	NK9701-29
		1962 A PI 1	[AMS Venera]	2MV-1 No. 1	S00371 NII-88					
1962 A RHO	1962 Aug 27 0653:14	1962 A RHO 1	Mariner 2	Mariner R-2	S00374 NASA/JPL	Atlas Agena B	179D (AA6)	CC	LC12	KHR-1
1962 A SIG	1962 Aug 29 0100	1962 A SIG	FTV 1153	CORONA 9044	S00377 NRO/CIA	Thor Agena D	349	V	75-1-2	VCR
		1962 A SIG	SRV 596	SRV	A00163 NRO/CIA					
1962 A TAU	1962 Sep 1 0212:30	1962 A TAU 1	Spuskaemiy apparat	2MV-1 No. 2 SA	A00160 NII-88	Molniya 8K78	T103-13	NIIP-5	LC1	NK9701-29
		1962 A TAU 1	[AMS Venera]	2MV-1 No. 2	S00381 NII-88					
1962 A UPS	1962 Sep 1 2039	1962 A UPS	FTV 1132	CORONA 9042A (ARGON)	S00385 NRO/CIA	Thor Agena B	348	V	75-3-5	VCR
		1962 A UPS	SRV 600	SRV	A00165 NRO/CIA					
1962 A PHI	1962 Sep 12 0059:13	1962 A PHI 1	[AMS Venera]	2MV-2	S00389 NII-88	Molniya 8K78	T103-14	NIIP-5	LC1	NK9701-29
1962 A CHI	1962 Sep 17 2346	1962 A CHI	FTV 1133	CORONA 9043	S00396 NRO/CIA	Thor Agena B	350	V	75-3-4	VCR
		1962 A CHI	TRS	ERS 2	A00168 USAF					
		1962 A CHI	SRV 597	SRV	A00170 NRO/CIA					
1962 A PSI	1962 Sep 18 0853:08	1962 A PSI 1	Tiros 6	Tiros F2 (A-51)	S00397 NASA GSFC	Thor Delta	318/D12	CC	LC17A	TR-1022
1962 A OME	1962 Sep 27 0939:51	1962 A OME 1	Kosmos- 9	Zenit-2 No. 7	S00422 NII-88	Vostok 8A92	T15000-06	NIIP-5	LC1	NK96-10-65
1962 B ALP	1962 Sep 29 0605	1962 B ALP 2	TAVE	TAVE	S00426 NASA GSFC	Thor Agena B	341 (TA1)	V	75-1-1	VCR
		1962 B ALP 1	Alouette 1	Alouette 1	S00424 DRTE					
1962 B BET	1962 Sep 29 2334:50	1962 B BET	FTV 1154	CORONA 9045	S00427 NRO/CIA	Thor Agena D	351	V	75-1-2	NRO3E88
		1962 B BET	SRV 598	SRV	A00176 NRO/CIA					
1962 B GAM	1962 Oct 2 2211:30	1962 B GAM 1	Explorer 14	EPE B (S-3A)	S00432 NASA GSFC	Thor Delta A	345/D13	CC	LC17B	TR-1022
1962 B DEL	1962 Oct 3 1215:11	1962 B DEL 1	Sigma Seven (MA-8)	Mercury SC16	S00433 NASA MSC	Atlas D	113D	CC	LC14	KHR-1
1962 B EPS	1962 Oct 9 1835	1962 B EPS	FTV 1134	CORONA 9046A (ARGON)	S00436 NRO/CIA	Thor Agena B	352	V	75-3-4	VCR
		1962 B EPS	SRV 603	SRV	A00179 NRO/CIA					
1962 B ZET	1962 Oct 17 0900:00	1962 B ZET 1	Kosmos-10	Zenit-2 No. 5	S00437 NII-88	Vostok 8A92	T15000-03	NIIP-5	LC1	NK96-10-65
1962 B ETA	1962 Oct 18 1659	1962 B ETA 1	Ranger 5	Ranger 5	S00439 NASA/JPL	Atlas Agena B	215D (AA7)	CC	LC12	KHR-1
		1962 B ETA	Ranger Capsule 18	Ranger Capsule 18	A00181 NASA/JPL					
1962 B THE	1962 Oct 20 0400	1962 B THE 1	Kosmos-11	DS-A1 No. 1	S00441 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	AVMDS
1962 B IOT	1962 Oct 24 1755:04	1962 B IOT 1	[AMS Mars]	2MV-4 No. 1	S00443 NII-88	Molniya 8K78	T103-15	NIIP-5	LC1	KIAM
1962-F08	1962 Oct 25	1962-F08	Kosmos	1MS	F00208 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	AVMNLJ
1962 B KAP	1962 Oct 26 1614	1962 B KAP	Starad	STARAD	S00444 NRO/CIA	Thor Agena D	353	V	75-1-2	VCR
1962 B LAM	1962 Oct 27 2315:01	1962 B LAM 1	Explorer 15	EPE C (NASA S-3C) SERB	S00445 NASA GSFC	Thor Delta A	346/D14	CC	LC17B	TR-1022
1962 B MU	1962 Oct 31 0803	1962 B MU 1	ANNA 1B	ANNA 1B	S00446 USN	Thor Ablestar	319 AB012	CC	LC17A	JCM
1962 B NU	1962 Nov 1 1614:16	1962 B NU 3	AMS Mars	2MV-4 No. 2	S00450 NII-88	Molniya 8K78	T103-16	NIIP-5	LC1	KIAM
1962 B XI	1962 Nov 4 1535:15	1962 B XI 1	Spuskaemiy apparat	2MV-3 No. 1 SA	A00186 NII-88	Molniya 8K78	T103-17	NIIP-5	LC1	KIAM
		1962 B XI 1	[AMS Mars]	2MV-3 No. 1	S00451 NII-88					
1962 B OMI	1962 Nov 5 2204	1962 B OMI	FTV 1136	CORONA 9047	S00453 NRO/CIA	Thor Agena B	356	V	75-3-4	VCR
		1962 B OMI	SRV 599	SRV	A00189 NRO/CIA					
1962 B PI	1962 Nov 11 2017:02	1962 B PI	FTV 2405	APP-201 PVP 855	S00455 AFSMS	Atlas Agena B	128D	PA	LC1-1	VCR
		1962 B PI	FTV 2405 RV	E-6 RV	A00192 AFSMS					
		1962 B PI	TRS 1	ERS 1	A00191 USAF					
1962 B RHO	1962 Nov 24 2201	1962 B RHO	FTV 1135	CORONA 9048	S00481 NRO/CIA	Thor Agena B	367	V	75-3-4	VCR
		1962 B RHO	SRV 601	SRV	A00195 NRO/CIA					
1962 B SIG	1962 Dec 4 2130	1962 B SIG	FTV 1155	CORONA 9049	S00490 NRO/CIA	Thor Agena D	361	V	75-1-2	VCR
		1962 B SIG	SRV 606	SRV	A00198 NRO/CIA					
1962 B TAU	1962 Dec 13 0407	1962 B TAU 4	SURCAL 2	SURCAL 2	S00508 USN	Thor Agena D	365	V	75-1-1	VCR
		1962 B TAU 2	Injun 3	Injun 3	S00504 USN					
		1962 B TAU 5	Calsphere 1	Calsphere 1	S00513 USN					
		1962 B TAU 1	NRL PL120	NRL PL120 Black Sphere	S00502 USN					
		1962 B TAU 3	NRL PL121	NRL PL121 Surcal	S00507 USN					
1962 B UPS	1962 Dec 13 2330:01	1962 B UPS 1	Relay 1	NASA A-15	S00503 NASA GSFC	Thor Delta B	355/D15	CC	LC17A	TR-1022
1962 B PHI	1962 Dec 14 2126	1962 B PHI	FTV 1156	CORONA 9050	S00505 NRO/CIA	Thor Agena D	368	V	75-3-5	VCR
		1962 B PHI	SRV 607	SRV	A00202 NRO/CIA					
1962 B CHI	1962 Dec 16 1433:04	1962 B CHI	Explorer 16	NASA S-55B	S00506 NASA LaRC	Scout X-3	S115	WI	LA3	LAAFB
1962-F09	1962 Dec 17 2036:33	1962-F09	Midas 6	Midas 6	F00210 USAF	Atlas Agena B	131D	PA	LC1-2	VCR
		1962-F09	TRS 3	ERS 3	F00211 USAF					
		1962-F09	TRS 4	ERS 4	F00212 USAF					
1962 B PSI	1962 Dec 19 0125:45	1962 B PSI 1	Transit VA-1	Transit VA-1	S00509 USN	Scout X-3	S118	PA	LC-D	LAAFB
1962 B OME	1962 Dec 22 0923	1962 B OME 1	Kosmos-12	Zenit-2 No. 6	S00517 NII-88	Vostok 8A92	T15000-10	NIIP-5	LC1	NK96-10-
1963-001	1963 Jan 4 0849	1963-001B	ALS	E-6 No. 2 SA	A00206 NII-88	Molniya 8K78/E6	T103-09	NIIP-5	LC1	NK9701-29
		1963-001B	[Luna-4]	E-6 No. 2	S00522 NII-88					
1963-002	1963 Jan 7 2109:49	1963-002A	OPS 0048	CORONA 9051	S00525 NRO/CIA	Thor Agena D	369	V	75-1-1	NRO



1963-F12	1963 Sep 27 1117:49	1963-F12	SRV 620	SRV 1002-2	A00265 NRO/CIA	Scout X-2B	S132	PA	LC-D	LAAFB
1963-038	1963 Sep 28 2022	1963-038B	OPS 1610	P35-5	F00255 USAF	Thor Ablestar	375 AB013	V	75-1-1	VCR
1963-039	1963 Oct 17 0237	1963-038C	Transit VBN-1	Transit VBN-1	S00670 USN					
		1963-039A	Transit VE-1	APL SN-39	S00671 USN					
		1963-039C	Vela 1A	Vela 1A	S00674 USAF	Atlas Agena D	197D	CC	LC13	JCM
		1963-039B	Vela 1B	Vela 1B	S00692 USAF					
1963-040	1963 Oct 18 0929:58	1963-040A	ERS 12	ERS 12	S00675 USAF					
1963-F13	1963 Oct 24	1963-F13	Kosmos-20	Zenit-2 No. 13	S00673 NII-88	Vostok 8A92	G15001-01	NIIP-5	LC1	NK96-10-65
1963-041	1963 Oct 25 1859:27	1963-041A	Kosmos	DS-Al No. 4	F00258 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	AVMDS
		1963-041	OPS 2196	APP-206 SV 953	S00677 NRO/USAF	Atlas Agena D	224D	PA	LC2-3	VCR
		1963-042	SRV	CORONA 9059A	A00274 NRO/USAF					
		1963-042A	OPS 2437	P-11 [A3]	S00681 NRO/CIA	Thor SLV-2A Agena D	386	V	75-3-4	VCR
		1963-042B	Hitchhiker 2	SRV	S00682 USAF/NSA					
		1963-042	SRV 602	SRV	A00279 NRO/CIA					
1963-043	1963 Nov 1 0856?	1963-043A	Polyot	I-2B No. 1	S00683 NII-88	Sputnik 11A59	E15003-02A	NIIP-5	LC31	RAEX
1963-F14	1963 Nov 9 2027:54	1963-F14	OPS 2268	CORONA 9060	F00260 NRO/CIA	Thor SLV-2 Agena D	400	V	75-1-2	VCR
		1963-F14	SRV 632	SRV	F00262 NRO/CIA					
1963-044	1963 Nov 11 0623:35	1963-044A	Spuskaemiy apparat	3MV-1 No. 1 SA	A00282 NII-88	Molniya 8K78	G103-18	NIIP-5	LC1	NK9701-29
		1963-044A	Kosmos-21	3MV-1 No. 1	S00687 NII-88					
1963-045	1963 Nov 16 1034?	1963-045A	Kosmos-22	Zenit-4	S00689 NII-88	Voskhod 11A57	G15000-06	NIIP-5	LC1	RAEX
1963-046	1963 Nov 27 0230:01	1963-046A	IMP 1	IMP A	S00693 NASA GSFC	Thor Delta C	387/D21	CC	LC17B	TR-1022
1963-047	1963 Nov 27 1903:23	1963-047A	AC-2 Instrumentation Ring	AC-2	A00284 NASA LeRC	Atlas Centaur	AC-2	CC	LC36A	TR-1022
1963-048	1963 Nov 27 2115	1963-048A	OPS 2260	CORONA 9061	S00695 NRO/CIA	Thor SLV-2 Agena D	406	PA	LC1-1	VCR
		1963-048	SRV 637	SRV	A00287 NRO/CIA					
1963-F15	1963 Nov 28	1963-F15	[Kosmos-23]	Zenit-2 No. 14	F00264 NII-88	Vostok 8A92	G15001-02	NIIP-5	LC1	NK96-10-65
1963-049	1963 Dec 5 2151	1963-049B	Transit VBN-2	Transit VBN-2	S00704 USN	Thor Ablestar	385 AB015	V	75-1-1	VCR
		1963-049C	Transit VE-3	Transit VE-3	S00705 USN					
		1963-050A	Kosmos-23	Omega-1 No. 2	S00707 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	RAEX
1963-050	1963 Dec 13 1415?	1963-050A	OPS 2372	APP-206 SV 954	S00711 NRO/USAF	Atlas Agena D	227D	PA	LC2-3	VCR
1963-051	1963 Dec 18 2145:30	1963-051A	SRV	SRV	A00291 NRO/USAF					
		1963-051	Kosmos-24	Zenit-2 No. 15	S00712 NII-88	Vostok 8A92	G15001-03	NIIP-5	LC1	NK96-10-65
1963-052	1963 Dec 19 0928:58	1963-052A	Explorer 19	AD-A	S00714 NASA LaRC	Scout X-4	S122R	PA	LC-D	LAAFB
1963-053	1963 Dec 19 1849:25	1963-053A	Tiros 8	Tiros H (A-53)	S00716 NASA GSFC	Thor Delta B	371/D22	CC	LC17B	TR-1022
1963-054	1963 Dec 21 0930:05	1963-054A	OPS 1388	CORONA 9062	S00718 NRO/CIA	Thor SLV-2A Agena D	398	V	75-1-2	VCR
1963-055	1963 Dec 21 2145	1963-055A	P-11 motor	P-11 motor	A00293 USAF/NSA					
		1963-055B	Hitchhiker 3	P-11 [A4]	S00719 USAF/NSA					
		1963-055	SRV 642	SRV	A00295 NRO/CIA					
1964-001	1964 Jan 11 2007	1964-001B	GGSE 1	GGSE 1	S00728 NRL	Thor SLV-2A Agena D	390	V	75-3-5	VCR
		1964-001C	EGRS 1	Secor 1	S00729 USA					
		1964-001D	SR 7A	SR 7A	S00730 NRL					
		1964-001E	GRAB	NRL PL 135	S00731 NRL					
1964-002	1964 Jan 19 1059:54	1964-002B	OPS 3367A	DAPP	S00734 USAF?	Thor SLV-2 Agena D	384	V	75-1-2	VCR
		1964-002C	OPS 3367B	DAPP	S00735 USAF?					
1964-003	1964 Jan 21 2114:59	1964-003A	Relay 2	Relay B (A-16)	S00737 NASA GSFC	Thor Delta B	373/D23	CC	LC17B	TR-1022
1964-004	1964 Jan 25 1359:04	1964-004A	Echo 2	Echo C (A-12)	S00740 NASA LaRC	Thor SLV-2 Agena B	397 (TA2)	V	75-1-1	VCR
1964-005	1964 Jan 29 1625:01	1964-005A	Jupiter Nosecone	Jupiter Nosecone	A00297 NASA MSFC	Saturn I	SA-5	CC	LC37B	SP-4205
1964-006	1964 Jan 30 0945:09	1964-006A	Elektron-1	2D No. 1	S00746 NII-88	Vostok 8K72K	-	NIIP-5	LC1	Energiya
		1964-006B	Elektron-2	2D No. 2	S00748 NII-88					
1964-007	1964 Jan 30 1549:09	1964-007A	Ranger 6	RA-6	S00747 NASA/JPL	Atlas Agena B	199D (AA8)	CC	LC12	TR-1022
1964-008	1964 Feb 15 2138	1964-008A	OPS 3444	CORONA 1004	S00752 NRO/CIA	Thor SLV-2A Agena D	389	V	75-3-4	VCR
		1964-008	SRV 629	SRV 1004-1	A00302 NRO/CIA					
		1964-008	SRV 628	SRV 1004-2	A00304 NRO/CIA					
1964-F01	1964 Feb 19 0547:40	1964-F01	Spuskaemiy apparat	3MV-1 No. 2 SA	F00270 NII-88	Molniya 8K78M	T15000-19	NIIP-5	LC1	NK9701-29
		1964-F01	[Zond]	3MV-1 No. 2	F00269 NII-88					
1964-009	1964 Feb 25 1859:47	1964-009A	OPS 2423	APP-206 SV 955	S00754 NRO/USAF	Atlas Agena D	285D	PA	LC2-3	VCR
		1964-009	SRV	SRV	A00307 NRO/USAF					
1964-010	1964 Feb 27 1326?	1964-010A	Kosmos-25	DS-Pl No. 4	S00757 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	RAE
1964-011	1964 Feb 28 0320	1964-011A	OPS 3722	Ferret 5	S00759 USAF/NSA	Thor SLV-2A Agena D	402	V	75-3-5	VCR
1964-012	1964 Mar 11 2014:24	1964-012A	OPS 3435	APP-206 SV 956	S00764 NRO/USAF	Atlas Agena D	296D	PA	LC2-3	VCR
		1964-012	SRV	SRV	A00310 NRO/USAF					
1964-013	1964 Mar 18 1507?	1964-013A	Kosmos-26	DS-MG No. 1	S00766 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	RAE
1964-F02	1964 Mar 19 1113:41	1964-F02	Beacon Explorer A	BE-A	F00273 NASA GSFC	Thor Delta B	391/D24	CC	LC17A	TR-1022
1964-F03	1964 Mar 21 0815:35	1964-F03	ALS	E-6 No. 6 SA	F00278 NII-88	Molniya 8K78M	T15000-20	NIIP-5	LC1	NK9701-29
		1964-F03	[Luna-5]	E-6 No. 6	F00277 NII-88					
1964-F04	1964 Mar 24 2222	1964-F04	OPS 3467	CORONA 1003	F00282 NRO/CIA	Thor SLV-2A Agena D	396	PA	LC1-1	VCR
		1964-F04	SRV 631	SRV 1003-1	F00284 NRO/CIA					
		1964-F04	SRV 630	SRV 1003-2	F00286 NRO/CIA					
		1964-F04	ORBIS 1	ORBIS 1	F00287 USAF					
1964-014	1964 Mar 27 0324:42	1964-014	Spuskaemiy apparat	3MV-1 No. 3 SA	A00312 NII-88	Molniya 8K78M	T15000-22	NIIP-5	LC1	NK9701-29
		1964-014A	Kosmos-27	3MV-1 No. 3	S00772 NII-88					
1964-015	1964 Mar 27 1725:23	1964-015A	Ariel 2	UK-C	S00771 UK DSIR	Scout X-3	S127R	WI	LA3	LAAFB
1964-016	1964 Apr 2 0242?	1964-016D	Spuskaemiy apparat	3MV-1 No. 4 SA	A00315 NII-88	Molniya 8K78M	T15000-23	NIIP-5	LC1	RAEX
		1964-016D	Zond	3MV-1 No. 4	S00785 NII-88					
1964-017	1964 Apr 4 0936?	1964-017A	Kosmos-28	Zenit-2 No. 16	S00779 NII-88	Vostok 8A92	G15001-04	NIIP-5	LC31	RAE
1964-018	1964 Apr 8 1600:01	1964-018A	Gemini I	Gemini SC1	S00782 NASA MSC	Titan II GLV	GT-1	CC	LC19	SP-4203
1964-019	1964 Apr 12 0921?	1964-019A	Polyot-2	I-2B No. 2	S00784 NII-88	Sputnik 11A59	T15001-01A	NIIP-5	LC31	RAE
1964-F05	1964 Apr 20 0808:28	1964-F05	ALS	E-6 No. 5 SA	F00293 NII-88	Molniya 8K78M	T15000-21	NIIP-5	LC1	NK9701-29
		1964-F05	[Luna-5]	E-6 No. 5	F00292 NII-88					
1964-F06	1964 Apr 21 1850	1964-F06	Transit VBN-3	Transit VBN-3	F00297 USN	Thor Ablestar	379 AB014	V	75-1-1	VCR
		1964-F06	Transit VE-2	Transit VE-2	F00298 USN					
1964-020	1964 Apr 23 1619?	1964-020A	OPS 3743	APP-206 SV 957	S00786 NRO/USAF	Atlas Agena D	351D	PA	LC2-3	RAE
		1964-020	SRV	SRV	A00313 NRO/USAF					



1964-021	1964 Apr 25 1019?	1964-021A	Kosmos-29	Zenit-2 No. 19	S00791 NII-88	Vostok 8A92	R15001-01	NIIP-5	LC31	RAE
1964-022	1964 Apr 27 2323	1964-022A	OPS 2921	CORONA 1005	S00796 NRO/CIA	Thor SLV-2A Agena D	395	V	75-3-4	VCR
		1964-022	SRV 618	SRV 1005-1	A00325 NRO/CIA					
		1964-022	SRV 635	SRV 1005-2	A00327 NRO/CIA					
1964-023	1964 May 18 0950?	1964-023A	Kosmos-30	Zenit-4	S00797 NII-88	Voskhod 11A57	G15000-12	NIIP-5	LC1	RAE
1964-024	1964 May 19 1921:14	1964-024A	OPS 3592	AFP-206 SV 958	S00799 NRO/USAF	Atlas Agena D	350D	PA	LC2-3	VCR
		1964-024	SRV	SRV	A00332 NRO/USAF					
1964-025	1964 May 28 1707:00	1964-025A	Apollo BP-13	Apollo BP-13 CM	S00800 NASA MSC	Saturn I	SA-6	CC	LC37B	SP-4205
1964-026	1964 Jun 4 0350:55	1964-026A	Transit VC	Transit VC	S00801 USN	Scout X-4	S125R	PA	LC-D	LAAFB
1964-F07	1964 Jun 4	1964-F07	Molniya-1 No 2	Molniya-1 No 2	F00302 NII-88	Molniya 8K78	R103-34	NIIP-5	LC1	AVMNLJ
1964-027	1964 Jun 4 2259	1964-027A	OPS 3483	CORONA 1006	S00802 NRO/CIA	Thor SLV-2A Agena D	403	PA	LC1-1	VCR
		1964-027	SRV 638	SRV 1006-1	A00339 NRO/CIA					
		1964-027	SRV 639	SRV 1006-2	A00341 NRO/CIA					
1964-028	1964 Jun 6 0600?	1964-028A	Kosmos-31	DS-MT No. 2	S00803 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	RAE
1964-029	1964 Jun 10 1048?	1964-029A	Kosmos-32	Zenit-2 No. 18	S00807 NII-88	Vostok 8A92	R15001-02	NIIP-5	LC31	RAE
1964-030	1964 Jun 13 1547	1964-030A	OPS 3236	CORONA 9063A	S00811 NRO/CIA	Thor SLV-2A Agena D	408	V	75-1-2	VCR
		1964-030A	Starflash 1A	Starflash 1A	A00344 USAF					
		1964-030	SRV 661	SRV	A00347 NRO/CIA					
1964-031	1964 Jun 18 0456:08	1964-031A	OPS 4467A	DAPP	S00812 USAF	Thor SLV-2 Agena D	407	V	75-3-4	VCR
		1964-031B	OPS 4467B	DAPP	S00813 USAF					
1964-032	1964 Jun 19 2318	1964-032A	OPS 3754	CORONA 1007	S00814 NRO/CIA	Thor SLV-2A Agena D	410	V	75-1-1	VCR
		1964-032	SRV 634	SRV 1007-1	A00350 NRO/CIA					
		1964-032	SRV 633	SRV 1007-2	A00352 NRO/CIA					
1964-033	1964 Jun 23 1019?	1964-033A	Kosmos-33	Zenit-2 No. 20	S00816 NII-88	Vostok 8A92	G15001-05	NIIP-5	LC31	RAE
1964-F08	1964 Jun 25 0140:24	1964-F08	ESRS	AFCLR B	F00304 USAF AFCLR	Scout X-4	S128R	PA	LC-D	LAAFB
1964-F09	1964 Jun 30 1404:22	1964-F09	Centaur AC-3	Centaur 1C	F00305 NASA LeRC	Atlas Centaur	AC-3	CC	LC36A	TR-1022
		1964-F09	AC-3 Instrumentation Ring	AC-3	F00306 NASA LeRC					
1964-034	1964 Jul 1 1116?	1964-034A	Kosmos-34	Zenit-4	S00822 NII-88	Voskhod 11A57	T15000-04	NIIP-5	LC1	RAE
1964-035	1964 Jul 2 2359:56	1964-035A	OPS 3395	Ferret 6	S00824 USAF/NSA	Thor SLV-2A Agena D	409	V	75-3-5	VCR
1964-036	1964 Jul 6 1851:18	1964-036A	OPS 3684	AFP-206 SV 959	S00825 NRO/USAF	Atlas Agena D	352D	PA	LC2-3	VCR
		1964-036B	OPS 4923	[EHH A3]	S00826 USAF/NSA					
		1964-036	SRV	SRV	A00358 NRO/USAF					
1964-038	1964 Jul 10 2151:02	1964-038A	Elektron-3	2D No. 3	S00829 NII-88	Vostok 8K72K	-	NIIP-5	LC1	Energiya
		1964-038B	Elektron-4	2D No. 4	S00830 NII-88					
1964-037	1964 Jul 10 2315	1964-037A	OPS 3491	CORONA 1008	S00828 NRO/CIA	Thor SLV-2A Agena D	404	PA	LC1-1	VCR
		1964-037	SRV 640	SRV 1008-1	A00362 NRO/CIA					
		1964-037	SRV 641	SRV 1008-2	A00367 NRO/CIA					
1964-039	1964 Jul 15 1131?	1964-039A	Kosmos-35	Zenit-2 No. 21	S00833 NII-88	Vostok 8A92	R15001-03	NIIP-5	LC31	RAE
1964-040	1964 Jul 17 0822	1964-040A	Vela 2A	Vela 2A	S00836 USAF	Atlas Agena D	216D	CC	LC13	MR640727-22
		1964-040B	Vela 2B	Vela 2B	S00837 USAF					
		1964-040C	ERS 13	ERS 13	S00838 USAF					
1964-041	1964 Jul 28 1650:07	1964-041A	Ranger 7	Ranger 7	S00842 NASA/JPL	Atlas Agena B	250D (AA9)	CC	LC12	TR-1022
1964-042	1964 Jul 30 0336?	1964-042A	Kosmos-36	DS-P1-Yu No. 1	S00844 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	RAE
1964-043	1964 Aug 5 2315:35	1964-043A	OPS 3042	CORONA 1009	S00846 NRO/CIA	Thor SLV-2A Agena D	413	V	75-3-4	VCR
		1964-043	SRV 646	SRV 1009-1	A00372 NRO/CIA					
		1964-043	SRV 647	SRV 1009-2	A00374 NRO/CIA					
1964-044	1964 Aug 14 0936?	1964-044A	Kosmos-37	Zenit-2 No. 22	S00848 NII-88	Vostok 8A92	R15001-04	NIIP-5	LC31	RAE
1964-045	1964 Aug 14 2200:13	1964-045A	OPS 3802	AFP-206 SV 960	S00850 NRO/USAF	SLV-3 Agena D	7101	V	PALC2-4	VCR
		1964-045B	OPS 3316	P-11 No. 4202	S00851 USAF					
		1964-045	SRV	SRV	A00378 NRO/USAF					
1964-046	1964 Aug 18 0915	1964-046A	Kosmos-38	Strela-1	S00853 MO SSSR	Kosmos 65S3	02L	NIIP-5	LC41/15	RAE
		1964-046B	Kosmos-39	Strela-1	S00854 MO SSSR					
		1964-046C	Kosmos-40	Strela-1	S00855 MO SSSR					
1964-047	1964 Aug 19 1215:02	1964-047A	Syncom 3	Syncom C	S00858 NASA GSFC	Thor Delta D	417/D25	CC	LC17A	TR-1022
1964-048	1964 Aug 21 1545	1964-048A	OPS 2739	CORONA 9064A	S00861 NRO/CIA	Thor SLV-2A Agena D	412	V	75-1-2	VCR
		1964-048	Starflash 1B	Starflash 1B	A00381 USAF					
		1964-048	SRV 667	SRV	A00384 NRO/CIA					
1964-049	1964 Aug 22 0712?	1964-049D	Kosmos-41	Molniya-1	S00869 NII-88	Molniya 8K78	R103-36	NIIP-5	LC1	RAEX
1964-050	1964 Aug 22 1102?	1964-050A	Kosmos-42	Strela-1	S00864 MO SSSR	Kosmos 63S1	-	GTSP-4	Mayak-2	RAE
		1964-050C	Kosmos-43	Strela-1	S00867 MO SSSR					
1964-051	1964 Aug 25 1343	1964-051A	Explorer 20	NASA S-48	S00870 NASA GSFC	Scout X-4	S134R	V	PALC-D	JCM
1964-052	1964 Aug 28 0756:57	1964-052A	Nimbus 1	Nimbus A	S00872 NASA GSFC	Thor SLV-2 Agena B	399 (TA3)	V	75-1-1	VCR
1964-053	1964 Aug 28 1619?	1964-053A	Kosmos-44	Meteor No. 1	S00876 NII-88	Vostok 8A92M	T15000-05	NIIP-5	LC31	RAE
1964-F10	1964 Sep 1 1500:06	1964-F10	Transtage 2	Transtage 2	F00308 USAF	Titan IIA	3A-2	CC	LC20	PH960801
		1964-F10	Titan 3A Fairing	Lead Dummy Payload	F00307 USAF					
1964-054	1964 Sep 5 0123	1964-054A	OGO 1	OGO A	S00879 NASA GSFC	Atlas Agena B	195D (AA10)	CC	LC12	TR-1022
1964-055	1964 Sep 13 0950?	1964-055A	Kosmos-45	Zenit-4	S00880 NII-88	Voskhod 11A57	R15001-01	NIIP-5	LC1	RAE
1964-056	1964 Sep 14 2253	1964-056A	OPS 3497	CORONA 1010	S00882 NRO/CIA	Thor SLV-2A Agena D	405	V	PALC1-1	VCR
		1964-056	SRV 644	SRV 1010-1	A00393 NRO/CIA					
		1964-056	SRV 652	SRV 1010-2	A00396 NRO/CIA					
1964-057	1964 Sep 18 1622:43	1964-057A	Apollo BP-15	Apollo BP-15 CM	S00883 NASA MSC	Saturn I	SA-7	CC	LC37B	SP-4205
1964-058	1964 Sep 23 2006?	1964-058A	OPS 4262	AFP-206 SV 962	S00884 NRO/USAF	SLV-3 Agena D	7102	V	PALC2-4	TLE
		1964-058	SRV	SRV	A00385 NRO/USAF					
1964-059	1964 Sep 24 1200?	1964-059A	Kosmos-46	Zenit-2 No. 23	S00885 NII-88	Vostok 8A92	R15001-05	NIIP-5	LC31	RAE
1964-060	1964 Oct 4 0345:00	1964-060A	IMP 2	IMP B	S00889 NASA GSFC	Thor Delta C	392/D26	CC	LC17A	TR-1022
1964-061	1964 Oct 5 2150:14	1964-061A	OPS 3333	CORONA 1011	S00890 NRO/CIA	Thor SLV-2A Agena D	421	V	75-3-4	VCR
		1964-061	SRV 653	SRV 1011-1	A00406 NRO/CIA					
		1964-061	SRV 654	SRV 1011-2	A00401 NRO/CIA					
1964-062	1964 Oct 6 0712:00	1964-062A	Kosmos-47	Voskhod 3KV No. 2	S00891 NII-88	Voskhod 11A57	R15000-02	NIIP-5	LC1	VSA074
1964-063	1964 Oct 6 1704:21	1964-063B	NNS O-1	NNS O-1	S00897 USN	Thor Ablestar	423 AB016	V	75-1-2	VCR
		1964-063C	Dragsphere 1	Dragsphere	S00900 USN					
		1964-063E	Dragsphere 2	Dragsphere	S00902 USN					

1964-F11	1964 Oct 8	1964-F11	OPS 4036	AFP-206 SV 961	F00310 NRO/USAF	SLV-3 Agena D	7103	V	PALC2-4	VAFB
		1964-F11	SRV	SRV	F00312 NRO/USAF					
1964-064	1964 Oct 10 0300	1964-064A	Explorer 22	Beacon Explorer B	S00899 NASA GSFC	Scout X-4	S123R	V	PALC-D	JCM
1964-065	1964 Oct 12 0730:01	1964-065A	Voskhod	Voskhod 3KV No. 3	S00904 NII-88	Voskhod 11A57	R15000-04	NIIP-5	LC1	VSA074
1964-066	1964 Oct 14 0950?	1964-066A	Kosmos-48	Zenit-2 No. 24	S00908 NII-88	Vostok 8A92	R15002-01	NIIP-5	LC31	RAE
1964-067	1964 Oct 17 2202:23	1964-067A	OPS 3559	CORONA 1012	S00911 NRO/CIA	Thor SLV-2A Agena D	418	V	PALC1-1	VCR
		1964-067	SRV 651	SRV 1012-1	A00412 NRO/CIA					
		1964-067	SRV 645	SRV 1012-2	A00414 NRO/CIA					
1964-F12	1964 Oct 23 0730	1964-F12	Kosmos	Strela-1	F00314 MO SSSR	Kosmos 65S3	01L	NIIP-5	LC41/15	Glazami
		1964-F12	Kosmos	Strela-1	F00315 MO SSSR					
		1964-F12	Kosmos	Strela-1	F00316 MO SSSR					
1964-068	1964 Oct 23 1830?	1964-068A	OPS 4384	AFP-206 SV 963	S00912 NRO/USAF	Atlas Agena D	353D	V	PALC2-3	TLE
		1964-068	SRV	SRV	A00397 NRO/USAF					
		1964-068B	OPS 5063	[EHH A4]	S00914 USAF/NSA					
1964-069	1964 Oct 24 0516?	1964-069A	Kosmos-49	DS-MG No. 2	S00913 MO SSSR	Kosmos 63S1	-	GTsP-4	Mayak-2	RAE
1964-070	1964 Oct 28 1048?	1964-070A	Kosmos-50	Zenit-2 No. 25	S00919 NII-88	Vostok 8A92	R15002-02	NIIP-5	LC31	RAE
1964-071	1964 Nov 2 2130:20	1964-071	OPS 5434	CORONA 1013	A00419 NRO/CIA	Thor SLV-2A Agena D	420	V	75-3-4	VCR
		1964-071	SRV 656	SRV 1013-1	A00426 NRO/CIA					
		1964-071	SRV 657	SRV 1013-2	A00428 NRO/CIA					
1964-072	1964 Nov 4 0212:11	1964-072A	OPS 3062	Ferret 7	S00922 USAF/NSA	Thor SLV-2A Agena D	430	V	75-3-5	VCR
1964-073	1964 Nov 5 1922:05	1964-073A	Mariner 3	Mariner C-2	S00923 NASA/JPL	Atlas Agena D	289D (AA11)	CC	LC13	TR-1022
1964-074	1964 Nov 6 1202:01	1964-074A	Explorer 23	NASA S-55C	S00924 NASA LaRC	Scout X-4	S133R	WI	LA3A	TN-D-4284
1964-075	1964 Nov 18 2035:54	1964-075A	OPS 3360	CORONA 1014	S00930 NRO/CIA	Thor SLV-2A Agena D	416	V	75-1-1	VCR
		1964-075	SRV 659	SRV 1014-1	A00433 NRO/CIA					
		1964-075	SRV 660	SRV 1014-2	A00435 NRO/CIA					
		1964-075A	ORBIS	ORBIS	A00431 USAF					
1964-076	1964 Nov 21 1709:39	1964-076A	Explorer 24	AD-B	S00931 NASA LaRC	Scout X-4	S135R	V	PALC-D	MOR S-863-64-
02		1964-076B	Explorer 25	Injun 4	S00932 NASA LaRC					
1964-077	1964 Nov 28 1422:01	1964-077A	Mariner 4	Mariner C-3	S00938 NASA/JPL	Atlas Agena D	288D (AA12)	CC	LC12	TR-1022
1964-078	1964 Nov 30 1312?	1964-078C	Zond-2	3MV-4A No. 2	S00945 NII-88	Molniya 8K78	-	NIIP-5	LC1	RAE
1964-F13	1964 Dec 1	1964-F13	Kosmos	DS-2 No. 2	F00319 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	AVMDS
1964-079	1964 Dec 4 1857?	1964-079A	OPS 4439	AFP-206 SV 964	S00946 NRO/USAF	SLV-3 Agena D	7105	V	PALC2-4	RAE
		1964-079	SRV	SRV	A00437 NRO/USAF					
1964-080	1964 Dec 9 2302?	1964-080A	Kosmos-51	DS-MT No. 3	S00947 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	RAE
1964-081	1964 Dec 10 1653:33	1964-081A	Transtage 1	Transtage 1	S00949 USAF	Titan IIIA	3A-1	CC	LC20	PH960801
		1964-081	Titan 3A Pairing	Lead Dummy Payload	A00441 USAF					
1964-082	1964 Dec 11 1425:02	1964-082A	Centaur AC-4	Centaur 4C	A00442 NASA LeRC	Atlas Centaur	AC-4	CC	LC36A	TR-1022
		1964-082A	Surveyor Mass Model	Surveyor Model	S00951 NASA/JPL					
1964-083	1964 Dec 13 0008:10	1964-083D	NNS O-2	NNS O-2	S00965 USN	Thor Ablestar	427 AB017	V	75-1-2	VCR
		1964-083C	Transit VE-5	APL SN-43	S00959 USN					
1964-084	1964 Dec 15 2020:04	1964-084A	San Marco 1	San Marco 1	S00957 CRS	Scout X-4	S137R	WI	LA3A	LAAFB
1964-085	1964 Dec 19 2110:16	1964-085A	OPS 3358	CORONA 1015	S00961 NRO/CIA	Thor SLV-2A Agena D	424	V	75-3-4	VCR
		1964-085	SRV 662	SRV 1015-1	A00446 NRO/CIA					
		1964-085	SRV 663	SRV 1015-2	A00450 NRO/CIA					
1964-086	1964 Dec 21 0900:03	1964-086A	Explorer 26	EPE-D	S00963 NASA GSFC	Thor Delta C	393/D27	CC	LC17A	TR-1022
1964-087	1964 Dec 21 1908:56	1964-087A	OPS 3762	FTV 2355	S00964 NRO/USAF	Thor SLV-2A Agena D	425	V	75-1-1	VCR
		1964-087	SRV	SRV	A00448 NRO/CIA					
1965-001	1965 Jan 11 0936?	1965-001A	Kosmos-52	Zenit-2 No. 26	S00968 NII-88	Vostok 8A92	R15002-03	NIIP-5	LC31	RAE
1965-002	1965 Jan 15 2100:44	1965-002A	OPS 3928	CORONA 1016	S00972 NRO/CIA	Thor SLV-2A Agena D	414	V	75-3-5	VCR
		1965-002	SRV 665	SRV 1016-1	A00457 NRO/CIA					
		1965-002	SRV 666	SRV 1016-2	A00460 NRO/CIA					
1965-003	1965 Jan 19 0503:42	1965-003A	OPS 7040	DAPP 10	S00973 USAF	Thor MG-18	224	V	4300B6	VCR
1965-F01	1965 Jan 21 2134:54	1965-F01	OVI-1	OVI-1	F00321 USAF OAR	Atlas D	172D	CC	576B3	VCR
1965-004	1965 Jan 22 0752:00	1965-004A	Tiros 9	Tiros I (A-54)	S00978 NASA GSFC	Thor Delta C	374/D28	V	LC17A	TR-1022
1965-005	1965 Jan 23 2009?	1965-005A	OPS 4703	AFP-206 SV 965	S00980 NRO/USAF	SLV-3 Agena D	7106	V	PALC2-3	RAE
		1965-005	SRV	SRV	A00452 NRO/USAF					
1965-006	1965 Jan 30 0936?	1965-006A	Kosmos-53	DS-A1 No. 5	S00983 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	RAE
1965-007	1965 Feb 3 1636:00	1965-007A	OSO 2	OSO B2 (S-17)	S00987 NASA GSFC	Thor Delta C	411/D29	CC	LC17B	TR-1022
1965-008	1965 Feb 11 1519:05	1965-008B	Transtage 3	Transtage 3	S01000 USAF	Titan IIIA	3A-3	CC	LC20	PH960801
		1965-008C	LES 1	LES 1	S01002 USAF					
		1965-008A	Transtage Payload Truss	Payload Truss	S01001 USAF					
1965-F02	1965 Feb 12	1965-F02	Kosmos	DS-P1-Yu No. 2	F00324 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	AVMDS
1965-009	1965 Feb 16 1437:03	1965-009A	Pegasus 1	Pegasus 1	S01085 NASA MSFC	Saturn I	SA-9	CC	LC37B	SP-4205
		1965-009B	Apollo BP-16	Apollo BP-16 CM	S01088 NASA MSC					
1965-010	1965 Feb 17 1705:00	1965-010A	Ranger 8	RA-8	S01086 NASA/JPL	Atlas Agena B	196D (AA13)	CC	LC12	TR-1022
1965-F03	1965 Feb 20	1965-F03	Kosmos	DS-A1 No. 6	F00327 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	AVMDS
1965-011	1965 Feb 21 1100	1965-011A	Kosmos-54	Strela-1	S01089 MO SSSR	Kosmos 65S3	03L	NIIP-5	LC41/15	RAE
		1965-011B	Kosmos-55	Strela-1	S01090 MO SSSR					
		1965-011C	Kosmos-56	Strela-1	S01091 MO SSSR					
1965-012	1965 Feb 22 0740:48	1965-012A	Kosmos-57	Voskhod 3KD No. 1	S01093 NII-88	Voskhod 11A57	R15000-03	NIIP-5	LC31	VSA074
1965-013	1965 Feb 25 2144:55	1965-013A	OPS 4782	CORONA 1017	S01096 NRO/CIA	Thor SLV-2A Agena D	432	V	PALC1-1	VCR
		1965-013	SRV 623	SRV 1017-1	A00471 NRO/CIA					
		1965-013	SRV 625	SRV 1017-2	A00473 NRO/CIA					
1965-014	1965 Feb 26 0502?	1965-014A	Kosmos-58	Meteor No. 2	S01097 NII-88	Vostok 8A92M	R15000-09	NIIP-5	LC31	RAE
1965-F04	1965 Mar 2 1325	1965-F04	Centaur AC-5	Centaur 6C	F00328 NASA LeRC	Atlas Centaur	AC-5	CC	LC36A	TR-1022
		1965-F04	Surveyor SD-1	Surveyor SD-1	F00329 NASA/JPL					
1965-015	1965 Mar 7 0907?	1965-015A	Kosmos-59	Zenit-4	S01191 MOM	Voskhod 11A57	R15001-05	NIIP-5	LC31	RAE
1965-016	1965 Mar 9 1829:47	1965-016A	GRAB 6	NRL PL 142	S01271 USN	Thor SLV-2 Agena D	419	V	75-1-2	VCR
		1965-016B	GGSE 2	GGSE 2	S01244 USN					
		1965-016C	GGSE 3	GGSE 3	S01292 USN					
		1965-016D	SR 7B	SR 7B	S01291 USN					

		1965-016E	EGRS 3	Secor 3	S01208 USA ACE					
		1965-016F	OSCAR 3	OSCAR 3	S01293 OSCAR					
		1965-016G	SURCAL 4	SURCAL	S01310 USN					
1965-017	1965 Mar 11 1339:59	1965-016H	Dodecapole I	Dodecapole I	S01272 USN					
		1965-017A	NNS O-3	NNS O-3	S01303 USN	Thor Ablestar	440 AB018	V	75-1-1	VCR
		1965-017B	EGRS 2	Secor 2	S01250 USA ACE					
1965-018	1965 Mar 12 0930	1965-018A	ALS	E-6 No. 9 SA	A00475 NII-88	Molniya 8K78/E6	R103-25	NIIP-5	LC1	JBIS53-319
		1965-018A	Kosmos-60	E-6 No. 9	S01246 MOM					
1965-019	1965 Mar 12 1925?	1965-019A	OPS 4920	APP-206 SV 966	S01247 NRO/USAF	SLV-3 Agena D	7104	V	PALC2-3	TLE
		1965-019	SRV	SRV	A00469 NRO/USAF					
1965-020	1965 Mar 15 1100	1965-020A	Kosmos-61	Strela-1	S01267 MO SSSR	Kosmos 65S3	04L	NIIP-5	LC41/15	RAE
		1965-020B	Kosmos-62	Strela-1	S01268 MO SSSR					
		1965-020C	Kosmos-63	Strela-1	S01269 MO SSSR					
1965-021	1965 Mar 18 0443:46	1965-021A	OPS 7353	DAPP 11	S01273 USAF	Thor MG-18	306	V	4300B6	VCR
1965-022	1965 Mar 18 0700:00	1965-022A	Voskhod-2	Voskhod 3KD No. 4	S01274 MOM	Voskhod 11A57	R15000-05	NIIP-5	LC1	VSA074
1965-023	1965 Mar 21 2137:02	1965-023A	Ranger 9	RA-9	S01294 NASA/JPL	Atlas Agena B	204D (AA14)	CC	LC12	TR-1022
1965-024	1965 Mar 23 1424:00	1965-024A	Gemini III	Gemini SC3	S01301 NASA MSC	Titan II GLV	GT-3	CC	LC19	SP-4203
1965-025	1965 Mar 25 1004?	1965-025A	Kosmos-64	Zenit-2 No. 17	S01305 MOM	Vostok 8A92	G15001-06	NIIP-5	LC31	RAE
1965-026	1965 Mar 25 2111:17	1965-026A	OPS 4803	CORONA 1018	S01307 NRO/CIA	Thor SLV-2A Agena D	429	V	75-3-4	VCR
		1965-026	SRV 668	SRV 1018-1	A00486 NRO/CIA					
		1965-026	SRV 669	SRV 1018-2	A00489 NRO/CIA					
1965-027	1965 Apr 3 2124	1965-027A	SNAP 10A	SNAP 10A	S01314 USAF/AEC	SLV-3 Agena D	7401	V	PALC2-4	JCM
		1965-027B	EGRS 4	Secor 4	S01315 USA ACE					
1965-028	1965 Apr 6 2347:50	1965-028A	Early Bird	Intelsat I	S01317 INTELSAT	Thor Delta D	426/D30	CC	LC17A	TR-1022
1965-F05	1965 Apr 10	1965-F05	ALS	E-6 No. 8 SA	F00334 NII-88	Molniya 8K78	R103-26	NIIP-5	LC1	NK9701-29
		1965-F05	[Luna-5]	E-6 No. 8	F00333 MOM					
1965-029	1965 Apr 17 0950?	1965-029A	Kosmos-65	Zenit-4	S01320 MOM	Voskhod 11A57	G15000-11	NIIP-5	LC31	RAE
1965-030	1965 Apr 23 0155?	1965-030A	Molniya-1	Molniya-1	S01324 MOM	Molniya 8K78	U103-35	NIIP-5	LC1	RAE
1965-031	1965 Apr 28 2017?	1965-031A	OPS 4983	APP-206 [F17]	S01327 NRO/USAF	SLV-3 Agena D	7107	V	PALC2-4	TLE
		1965-031B	OPS 6717	[EHH B1]	S01329 USAF/NSA					
		1965-031	SRV	A00487 NRO/USAF						
1965-032	1965 Apr 29 1417:00	1965-032A	Explorer 27	Beacon Explorer C	S01328 NASA GSFC	Scout X-4	S136R	WI	LA3A	LAAFB
1965-033	1965 Apr 29 2144:56	1965-033A	OPS 5023	CORONA 1019	S01330 NRO/CIA	Thor SLV-2A Agena D	437	V	PALC1-1	VCR
		1965-033	SRV 626	SRV 1019-1	A00501 NRO/CIA					
		1965-033B	SRV 627	SRV 1019-2	S01367 NRO/CIA					
1965-034	1965 May 6 1500:03	1965-034A	Transtage 6	Transtage 6	S01359 USAF	Titan IIIA	3A-6	CC	LC20	PH960801
		1965-034C	LCS 1	LCS 1	S01361 USAF					
		1965-034B	LES 2	LES 2	S01360 USAF					
1965-035	1965 May 7 0950?	1965-035A	Kosmos-66	Zenit-2 No. 27	S01362 MOM	Vostok 8A92	R15002-04	NIIP-5	LC31	RAE
1965-036	1965 May 9 0749:37	1965-036	ALS	E-6 No. 10 SA	A00506 NII-88	Molniya 8K78M	U103-30	NIIP-5	LC1	JBIS53-319
		1965-036A	Luna-5	E-6 No. 10	S01366 MOM					
1965-037	1965 May 18 1802:18	1965-037A	OPS 8431	CORONA 1021	S01374 NRO/CIA	Thor SLV-2A Agena D	438	V	75-3-4	VCR
		1965-037	SRV 674	SRV 1021-1	A00512 NRO/CIA					
		1965-037	SRV 670	SRV 1021-2	A00519 NRO/CIA					
1965-038	1965 May 20 1630:53	1965-038A	OPS 8386	DAPP 12	S01377 USAF	Thor Burner 1	282	V	4300B6	VCR
1965-039	1965 May 25 0735:01	1965-039A	Pegasus 2	Pegasus 2	S01381 NASA MSFC	Saturn I	SA-8	CC	LC37B	SP-4205
		1965-039B	Apollo BP-26	Apollo BP-26 CM	S01385 NASA MSC					
1965-040	1965 May 25 1048?	1965-040A	Kosmos-67	Zenit-4	S01382 MOM	Voskhod 11A57	R15001-04	NIIP-5	LC31	RAE
1965-041	1965 May 27 1930?	1965-041A	OPS 5236	APP-206 [F18]	S01386 NRO/USAF	SLV-3 Agena D	7108	V	PALC2-4	RAE
		1965-041	SRV	SRV	A00499 NRO/USAF					
1965-F06	1965 May 28 0254:56	1965-F06	OV1-3	OV1-3	F00338 USAF OAR	Atlas D	68D	V	ABRESB3	VCR
1965-042	1965 May 29 1200:00	1965-042A	IMP 3	IMP C	S01388 NASA GSFC	Thor Delta C	441/D31	CC	LC17B	TR-1022
1965-043	1965 Jun 3 1516:00	1965-043A	Gemini IV	Gemini SC4	S01390 NASA MSC	Titan II GLV	GT-4	CC	LC19	SP-4203
1965-044	1965 Jun 8 0740	1965-044A	ALS	E-6 No. 8 SA	A00525 NII-88	Molniya 8K78M	U103-31	NIIP-5	LC1	JBIS53-319
		1965-044A	Luna-6	E-6 No. 7	S01393 MOM					
1965-045	1965 Jun 9 2158:16	1965-045A	OPS 8425	CORONA 1020	S01396 NRO/CIA	Thor SLV-2A Agena D	444	V	75-3-5	VCR
		1965-045	SRV 672	SRV 1020-1	A00530 NRO/CIA					
		1965-045	SRV 673	SRV 1020-2	A00532 NRO/CIA					
1965-046	1965 Jun 15 1004?	1965-046A	Kosmos-68	Zenit-2 No. 29	S01404 MOM	Vostok 8A92	U15001-01	NIIP-5	LC31	RAE
1965-047	1965 Jun 18 1400:04	1965-047B	Transtage 7	Transtage 7	S01413 USAF	Titan IIIC	3C-7	CC	LC40	PH960801
		1965-047A	Titan 3A Fairing	Lead Ballast	S01412 USAF					
1965-048	1965 Jun 24 2235:29	1965-048A	NNS O-4	NNS O-4	S01420 USN	Thor Ablestar	447 AB019	V	75-1-1	VCR
1965-049	1965 Jun 25 0950?	1965-049A	Kosmos-69	Zenit-4	S01421 MOM	Voskhod 11A57	G15000-10	NIIP-5	LC1	RAE
1965-050	1965 Jun 25 1930?	1965-050B	OPS 5501	APP-206 [F19]	S01424 NRO/USAF	SLV-3 Agena D	7109	V	PALC2-4	TLE
		1965-050A	OPS 6749	[EHH B2]	S01422 USAF/NSA					
		1965-050	SRV	SRV	A00520 NRO/USAF					
1965-051	1965 Jul 2 0407:00	1965-051A	Tiros 10	Tiros OT1	S01430 ESSA	Thor Delta C	415/D32	CC	LC17B	TR-1022
1965-052	1965 Jul 2 0630?	1965-052A	Kosmos-70	DS-A1 No. 7	S01431 MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1	TLE
1965-F07	1965 Jul 12 1900	1965-F07	OPS 5810	APP-206 [F20]	F00340 NRO/USAF	SLV-3 Agena D	7112	V	PALC2-4	LR650712
		1965-F07	SRV	SRV	F00342 NRO/USAF					
1965-F08	1965 Jul 13	1965-F08	[Kosmos]	Zenit-2 No. 28	F00344 MOM	Vostok 8A92	R15002-05	NIIP-5	LC31	NK96-10-65
1965-053	1965 Jul 16 0331	1965-053A	Kosmos-71	Strela-1	S01441 MO SSSR	Kosmos 65S3	05L	NIIP-5	LC41/15	RAE
		1965-053B	Kosmos-72	Strela-1	S01442 MO SSSR					
		1965-053C	Kosmos-73	Strela-1	S01443 MO SSSR					
		1965-053D	Kosmos-74	Strela-1	S01444 MO SSSR					
		1965-053E	Kosmos-75	Strela-1	S01445 MO SSSR					
1965-054	1965 Jul 16 1116	1965-054A	Proton	N-4 No. 1	S01466 MOM	UR-500	107207-01 (207)	NIIP-5	LC81/23	NK9810-25
1965-055	1965 Jul 17 0555:01	1965-055A	OPS 8411	Ferret 8	S01447 USAF/NSA	Thor SLV-2A Agena D	422	V	75-1-2	VCR
1965-056	1965 Jul 18 1438?	1965-056A	Zond-3	3MV-4 No. 3	S01454 MOM	Molniya 8K78	-	NIIP-5	LC1	RAE
1965-057	1965 Jul 19 2201:12	1965-057A	OPS 5543	CORONA 1022	S01457 NRO/CIA	Thor SLV-2A Agena D	446	V	PALC1-1	VCR
		1965-057	SRV 664	SRV 1022-1	A00543 NRO/CIA					
		1965-057	SRV 658	SRV 1022-2	A00545 NRO/CIA					



1965-058	1965 Jul 20 0827	1965-058A 1965-058B 1965-058C	Vela 3A Vela 3B ERS 17	Vela 3A Vela 3B ORS 3	S01458 USAF S01459 USAF S01460 USAF	Atlas Agena D	225D	CC	LC13	MR650726-29
1965-059	1965 Jul 23 0433?	1965-059A	Kosmos-76	DS-P1-Yu No. 3	S01464 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	RAE
1965-060	1965 Jul 30 1300:00	1965-060A 1965-060B	Pegasus 3 Apollo BP-9A	Pegasus 3 Apollo BP-9A CM	S01467 NASA MSFC S01468 NASA MSC	Saturn I	SA-10	CC	LC37B	SP-4205
1965-061	1965 Aug 3 1102?	1965-061A	Kosmos-77	Zenit-4	S01469 MOM	Voskhod 11A57	U15001-01	NIIP-5	LC31	RAE
1965-062	1965 Aug 3 1912?	1965-062A 1965-062B 1965-062	OPS 5698 OPS 6761 SRV	AFP-206 [F21] [EHH B3] SRV	S01471 NRO/USAF S01472 USAF/NSA A00550 NRO/USAF	SLV-3 Agena D	7111	V	PALC2-4	RAE
1965-063	1965 Aug 10 1754:00	1965-063A 1965-063B	SEV Secor 5	SEV Secor 5	S01506 NASA LaRC S01502 USA	Scout B	S131R	WI	LA3A	LAAFB
1965-064	1965 Aug 11 1431:04	1965-064 1965-064A	Centaur AC-6 Surveyor SD-2	Centaur 2D Surveyor SD-2	A05008 NASA LeRC S01503 NASA/JPL	Atlas Centaur D	AC-6	CC	LC36B	TR-1022
1965-065	1965 Aug 13 2211:24	1965-065F 1965-065K 1965-065G 1965-065C 1965-065E 1965-065H	NNS O-5 SURCAL 5 Navspasur Rod Dodecapole 2 Tempsat 1 Calsphere	NNS O-5 SURCAL (NRL PL150C?) Long Rod Dodecapole 2 Tempsat 1 Calsphere (NRL PL 158?)	S01514 USN S01577 USN S01515 USN S01510 USN S01512 USN S01520 USN	Thor Ablestar	455 AB020	V	75-1-1	VCR
1965-066	1965 Aug 14 1116?	1965-066A	Kosmos-78	Zenit-2 No. 30	S01505 MOM	Vostok 8A92	U15001-02	NIIP-5	LC31	RAE
1965-067	1965 Aug 17 2059:57	1965-067A 1965-067 1965-067 1965-068A 1965-068C	OPS 7208 SRV 621 SRV 649 Gemini V REP	CORONA 1023 SRV 1023-1 SRV 1023-2 Gemini SC5 Rendezvous Evaluation Pod	S01513 NRO/CIA A00558 NRO/CIA A00560 NRO/CIA S01516 NASA MSC S01518 NASA MSC	Thor SLV-2A Agena D	449	V	PALC1-1	VCR
1965-068	1965 Aug 21 1400:00	1965-068A 1965-068C	Gemini V REP	Gemini SC5 Rendezvous Evaluation Pod	S01516 NASA MSC S01518 NASA MSC	Titan II GLV	GT-5	CC	LC19	SP-4203
1965-069	1965 Aug 25 1019?	1965-069A	Kosmos-79	Zenit-4	S01523 MOM	Voskhod 11A57	R15001-06	NIIP-5	LC1	RAE
1965-F09	1965 Aug 25 1517:00	1965-F09	OSO C	OSO C	F00348 NASA GSFC	Thor Delta C	434/D33	CC	LC17B	TR-1022
1965-F10	1965 Sep 2 2000:16	1965-F10	OPS 3373	FTV 1602	F00350 NRO/CIA	Thor SLV-2 Agena D	401	V	75-3-5	VCR
1965-070	1965 Sep 3 1400	1965-070A 1965-070B 1965-070C 1965-070D 1965-070E	Kosmos-80 Kosmos-81 Kosmos-82 Kosmos-83 Kosmos-84	Strela-1 Strela-1 Strela-1 Strela-1 Strela-1	S01570 MO SSSR S01571 MO SSSR S01572 MO SSSR S01573 MO SSSR S01574 MO SSSR	Kosmos 65S3	07LS	NIIP-5	LC41/15	RAE
1965-071	1965 Sep 9 0936?	1965-071A	Kosmos-85	Zenit-4	S01578 MOM	Voskhod 11A57	R15001-02	NIIP-5	LC31	RAE
1965-072	1965 Sep 10 0441:38	1965-072A	OPS 8068	DAPP 13	S01580 USAF	Thor Burner 1	213	V	4300B6	VCR
1965-073	1965 Sep 18 0759	1965-073A 1965-073B 1965-073C 1965-073D 1965-073E	Kosmos-86 Kosmos-87 Kosmos-88 Kosmos-89 Kosmos-90	Strela-1 Strela-1 Strela-1 Strela-1 Strela-1	S01584 MO SSSR S01585 MO SSSR S01586 MO SSSR S01587 MO SSSR S01588 MO SSSR	Kosmos 65S3	08LS	NIIP-5	LC41/15	RAE
1965-074	1965 Sep 22 2131:14	1965-074A 1965-074 1965-074	OPS 7221 SRV 622 SRV 643	CORONA 1024 SRV 1024-1 SRV 1024-2	S01602 NRO/CIA A00568 NRO/CIA A00573 NRO/CIA	Thor SLV-2A Agena D	458	V	PALC1-1	VCR
1965-075	1965 Sep 23 0907?	1965-075A	Kosmos-91	Zenit-4	S01603 MOM	Voskhod 11A57	R15001-03	NIIP-5	LC31	RAE
1965-076	1965 Sep 30 1920	1965-076A 1965-076 1965-077A 1965-077A	OPS 7208 SRV ALS Luna-7	AFP-206 [F22] SRV E-6 No. 11 SA E-6 No. 11	S01609 NRO/USAF A00569 NRO/USAF A00576 NII-88 S01610 MOM	SLV-3 Agena D	7110	V	PALC2-4	LR650930
1965-077	1965 Oct 4 0756:40	1965-077A 1965-077A	ALS Luna-7	E-6 No. 11 SA E-6 No. 11	A00576 NII-88 S01610 MOM	Molniya 8K78	U103-27	NIIP-5	LC1	JBIS53-319
1965-078	1965 Oct 5 0907:08	1965-078A	OV1-2	OV1-2S	S01613 USAF OAR	Atlas D	34D	V	ABRESB3	VCR
1965-079	1965 Oct 5 1745:57	1965-079A 1965-079 1965-079 1965-079	OPS 5325 SRV 650 SRV 636 OGO 2	CORONA 1025 SRV 1025-1 SRV 1025-2 OGO C (S-50)	S01615 NRO/CIA A00581 NRO/CIA A00583 NRO/CIA S01620 NASA GSFC	Thor SLV-2A Agena D	433	V	75-3-5	VCR
1965-081	1965 Oct 14 1311:55	1965-081A	OGO 2	OGO C (S-50)	S01621 MOM	Thor SLV-2A Agena D	435 (TA4)	V	75-1-1	VCR
1965-080	1965 Oct 14 1940?	1965-080A	Molniya-1	Molniya-1	S01621 MOM	Molniya 8K78	U103-37	NIIP-5	LC1	RAE
1965-082	1965 Oct 15 1723:59	1965-082DM 1965-082A 1965-082A	Transtage 4 OV2-1 LCS 2	Transtage 4 OV2-1 LCS 2	S01822 USAF S01624 USAF A00585 USAF	Titan IIIC	3C-4	CC	LC40	PH960801
1965-083	1965 Oct 16 0809?	1965-083A	Kosmos-92	Zenit-4	S01626 MOM	Voskhod 11A57	U15001-04	NIIP-5	LC31	RAE
1965-084	1965 Oct 19 0544?	1965-084A	Kosmos-93	DS-U2-V No. 1	S01629 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/1	RAE
1965-F11	1965 Oct 25 1500	1965-F11	TDA-2	TDA-2	F00352 NASA MSC	SLV-3 Agena D	5301	CC	LC14	KHR-1
1965-085	1965 Oct 28 0824?	1965-085A	Kosmos-94	Zenit-4	S01636 MOM	Voskhod 11A57	U15001-03	NIIP-5	LC31	RAE
1965-086	1965 Oct 28 2117:12	1965-086A 1965-086 1965-086	OPS 2155 SRV 701 SRV 702	CORONA 1026 SRV 1026-1 SRV 1026-2	S01637 NRO/CIA A00591 NRO/CIA A00594 NRO/CIA	Thor SLV-2A Agena D	439	V	PALC1-1	VCR
1965-087	1965 Nov 2 1228	1965-087A	Proton-2	N-4 No. 2	S01701 MOM	UR-500	209	NIIP-5	LC81/23	NK9810-25
1965-088	1965 Nov 4 0531?	1965-088A	Kosmos-95	DS-U2-V No. 2	S01706 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/1	RAE
1965-089	1965 Nov 6 1838:43	1965-089A	Explorer 29	GEOS A	S01726 NASA GSFC	Thor Delta E	457/D34	CC	LC17A	TR-1022
1965-090	1965 Nov 8 1926?	1965-090B 1965-090A 1965-090	OPS 6232 OPS 8293 SRV	Agena Pickaback AFP-206 [F23] SRV	A00596 USAF S01727 NRO/USAF A00589 NRO/USAF	SLV-3 Agena D	7113	V	PALC2-4	RAE
1965-091	1965 Nov 12 0502?	1965-091A	Venera-2	3MV-4 No. 4	S01730 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAE
1965-092	1965 Nov 16 0419?	1965-092 1965-092A	Spuskaemiy apparat Venera-3	3MV-3 No. 1 SA 3MV-3 No. 1	A00651 MOM S01733 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAE
1965-093	1965 Nov 19 0448:27	1965-093A	SR 8	Solar Explorer A	S01738 NRL	Scout X-4	S138R	WI	LA3A	LAAFB
1965-094	1965 Nov 23 0321?	1965-094A	Kosmos-96	3MV-4 No. 6	S01742 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAE
1965-095	1965 Nov 26 1214?	1965-095A	Kosmos-97	DS-U2-M No. 1	S01777 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/1	RAE
1965-096	1965 Nov 26 1447:21	1965-096A	Asterix	A-1	S01778 CNES	Diamant A	No. 1	HMG	Brigitte	Tiziou
1965-097	1965 Nov 27 0824?	1965-097A	Kosmos-98	Zenit-2 No. 31	S01780 MOM	Vostok 8A92	U15001-05	NIIP-5	LC31	RAE
1965-098	1965 Nov 29 0448:47	1965-098B 1965-098A	Explorer 31 Alouette 2	DME-A Alouette 2	S01806 NASA GSFC S01804 DRTE	Thor SLV-2 Agena B	453 (TA5)	V	75-1-1	VCR
1965-099	1965 Dec 3 1046:14	1965-099A	ALS	E-6 No. 11 SA	A00602 NII-88	Molniya 8K78	U103-28	NIIP-5	LC31	JBIS53-319

1965-100	1965 Dec 4	1930:04	1965-099A	Luna-8	E-6 No. 12	S01810	MOM								
1965-101	1965 Dec 6	2105:47	1965-100A	Gemini VII	Gemini SC7	S01812	NASA MSC	Titan II GLV	GT-7	CC	LC19		SP-4203		
1965-102	1965 Dec 9	2110:19	1965-101A	FR-1	FR-1	S01814	CNES	Scout X-4	S139R	V	PALC-D		LAAFB		
			1965-102A	OPS 7249	CORONA 1027	S01816	NRO/CIA	Thor SLV-2A Agena D	448	V	75-3-5		VCR		
			1965-102	SRV 648	SRV 1027-1	A00608	NRO/CIA								
			1965-102	SRV 655	SRV 1027-2	A00610	NRO/CIA								
1965-103	1965 Dec 10	0809?	1965-103A	Kosmos-99	Zenit-2 No. 32	S01817	MOM	Vostok 8A92	U15001-04	NIIP-5	LC31		RAE		
1965-104	1965 Dec 15	1337:26	1965-104A	Gemini VI-A	Gemini SC6	S01839	NASA MSC	Titan II GLV	GT-6	CC	LC19		SP-4203		
1965-U01	1965 Dec 16		1965-U01	-	OGCh No. 01L	A00614	RVSN	R-360 8K69	U22502 No. 1L	NIIP-5	LC67/21		GWU-NH74		
1965-105	1965 Dec 16	0731:21	1965-105A	Pioneer 6	Pioneer A	S01841	NASA ARC	Thor Delta E	460/D35	CC	LC17A		TR-1022		
1965-106	1965 Dec 17	0224?	1965-106A	Kosmos-100	Meteor No. 3	S01843	MOM	Vostok 8A92M	R15000-31	NIIP-5	LC31		RAE		
1965-107	1965 Dec 21	0614?	1965-107A	Kosmos-101	DS-P1-Yu No. 4	S01846	MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1		RAE		
1965-108	1965 Dec 21	1400:01	1965-108A	Transtage 8	Transtage 8	A00620	USAF	Titan IIIC	3C-8	CC	LC41		PH960801		
			1965-108A	OV2-3	OV2-3	S01863	USAF								
			1965-108D	LES 3	LES 3	S01941	USAF								
			1965-108B	LES 4	LES 4	S01870	USAF								
			1965-108C	Oscar 4	Oscar 4	S01902	OSCAR								
1965-109	1965 Dec 22	0433:04	1965-109A	NNS O-6	NNS O-6	S01864	USN	Scout A	S140C	V	PALC-D		LAAFB		
1965-110	1965 Dec 24	2106:15	1965-110A	OPS 4639	CORONA 1028	S01866	NRO/CIA	Thor SLV-2A Agena D	451	V	75-3-4		VCR		
			1965-110	SRV 703	SRV 1028-1	A00624	NRO/CIA								
			1965-110	SRV 704	SRV 1028-2	A00627	NRO/CIA								
			1965-111A	Kosmos-102	US-A	S01867	MOM	Soyuz 11A510	G15000-01	NIIP-5	LC31		RAE		
1965-F12	1965 Dec 28		1965-F12	Kosmos	DS-K-40 No. 1	F00355	MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1		AVMDS		
1965-112	1965 Dec 28	1230?	1965-112A	Kosmos-103	Strela-2 No. 1	S01868	MO SSSR	Kosmos 65S3	09LP	NIIP-5	LC41/15		RAEX		
1966-001	1966 Jan 7	0824?	1966-001A	Kosmos-104	Zenit-2 No. 36	S01903	MOM	Vostok 8A92	-	NIIP-5	LC31		RAE		
1966-F01	1966 Jan 8	0448:23	1966-F01	OPS 2394	DAPP 14	F00359	USAF	Thor Burner 1	251	V	4300B6		VCR		
1966-002	1966 Jan 19	2010?	1966-002A	OPS 7253	AFP-206 [F24]	S01939	NRO/USAF	SLV-3 Agena D	7114	V	PALC2-4		TLE		
			1966-002B	OPS 3179	Agena Pickaback	A00629	USAF								
			1966-002	SRV	SRV	A00625	NRO/USAF								
1966-003	1966 Jan 22	0838?	1966-003A	Kosmos-105	Zenit-2 No. 38	S01945	MOM	Vostok 8A92	-	NIIP-5	LC31		RAE		
1966-004	1966 Jan 25	1228?	1966-004A	Kosmos-106	DS-P1-I No. 1	S01949	MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1		RAE		
1966-005	1966 Jan 28	1706:00	1966-005A	NNS O-7	NNS O-7	S01952	USN	Scout A	S142C	V	PALC-D		LAAFB		
1966-006	1966 Jan 31	1141:37	1966-006A	ALS	E-6 No. 11 SA	A00633	NII-88	Molniya 8K78M	U103-32	NIIP-5	LC31		Energiya		
			1966-006A	Luna-9	E-6M No. 13	S01954	MOM								
1966-007	1966 Feb 2	2132:13	1966-007A	OPS 7291	CORONA 1029	S01968	NRO/CIA	Thor SLV-2A Agena D	450	V	PALC1-1		VCR		
			1966-007	SRV 705	SRV 1029-1	A00642	NRO/CIA								
			1966-007	SRV 706	SRV 1029-2	A00645	NRO/CIA								
1966-008	1966 Feb 3	0741:23	1966-008A	ESSA 1	Tiros OT3	S01982	ESSA	Thor Delta C	445/D36	CC	LC17A		TR-1022		
1966-U01	1966 Feb 5	1220	1966-U01	-	OGCh	A00640	RVSN	R-360 8K69	U22502 No. 02L	NIIP-5	LC67/21		Kosmodrom9904		
1966-009	1966 Feb 9	1945:01	1966-009A	OPS 1439	Ferret 9	S01997	USAF/NSA	Thor SLV-2A Agena D	428	V	75-1-2		VCR		
1966-010	1966 Feb 10	0852?	1966-010A	Kosmos-107	Zenit-2 No. 34	S01998	MOM	Vostok 8A92	-	NIIP-5	LC31		RAE		
1966-011	1966 Feb 11	1800?	1966-011A	Kosmos-108	DS-U1-G No. 1	S02002	MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1		RAE		
1966-012	1966 Feb 15	2030?	1966-012A	OPS 1184	AFP-206 [F25]	S02012	NRO/USAF	SLV-3 Agena D	7115	V	PALC2-4		TLE		
			1966-012B	OPS 3011	Bluebell 2 Cylinder	S02014	USAF								
			1966-012C	OPS 3031	Bluebell 2 Sphere	S02015	USAF								
			1966-012	SRV	SRV	A00632	NRO/USAF								
1966-013	1966 Feb 17	0833:36	1966-013A	Diapason D-1A	Diapason D-1A	S02016	CNES	Diamant A	No. 2	HMG	Brigitte		Tiziou		
1966-014	1966 Feb 19	0852?	1966-014A	Kosmos-109	Zenit-4	S02019	MOM	Voskhod 11A57	-	NIIP-5	LC31		RAE		
1966-F02	1966 Feb 21		1966-F02	Kosmos	DS-K-40 No. 2	F00362	MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1		AVMDS		
1966-015	1966 Feb 22	2009:36	1966-015A	Kosmos-110	Voskhod 3KV No. 5	S02070	MOM	Voskhod 11A57	R15000-06	NIIP-5	LC31		VSA074		
1966-016	1966 Feb 28	1358:00	1966-016A	ESSA 2	Tiros OT2	S02091	ESSA	Thor Delta E	461/D37	CC	LC17B		TR-1022		
1966-017	1966 Mar 1	1103:49	1966-017A	Kosmos-111 DU	E-6S No. 204	A00653	MOM	Molniya 8K78M	N103-41	NIIP-5	LC31		JBIS53-319		
			1966-017A	Kosmos-111	E-6S No. 204 ISL	S02093	NII-88								
1966-018	1966 Mar 9	2202:03	1966-018A	OPS 3488	CORONA 1030	S02099	NRO/CIA	Thor SLV-2A Agena D	452	V	75-3-4		VCR		
			1966-018	SRV 709	SRV 1030-1	A00658	NRO/CIA								
			1966-018	SRV 710	SRV 1030-2	A00666	NRO/CIA								
1966-019	1966 Mar 16	1500:03	1966-019A	TDA 3	TDA 3	S02104	NASA MSC	SLV-3 Agena D	5302	CC	LC14		KHR-1		
1966-020	1966 Mar 16	1641:02	1966-020A	Gemini VIII	Gemini SC8	S02105	NASA MSC	Titan II GLV	GT-8	CC	LC19		SP-4203		
1966-021	1966 Mar 17	1028	1966-021A	Kosmos-112	Zenit-2 No. 37	S02107	MOM	Vostok 8A92	-	NIIP-53	LC41/1		NK96-10-65		
1966-E01	1966 Mar 17	2200	-	-	OGCh	S02114	RVSN	R-360 8K69	U22502 No. 03L	NIIP-5	LC67/21		Kosmodrom9904		
1966-022	1966 Mar 18	2030?	1966-022A	OPS 0879	AFP-206 [F26]	S02109	NRO/USAF	SLV-3 Agena D	7116	V	PALC2-4		RAE		
			1966-022B	OPS 0974	NRL PL137	A00663	USAF/NRL								
			1966-022	SRV	SRV	A00650	NRO/USAF								
1966-023	1966 Mar 21	0936?	1966-023A	Kosmos-113	Zenit-4	S02114	MOM	Voskhod 11A57	-	NIIP-5	LC31		RAE		
1966-F03	1966 Mar 24		1966-F03	[Proton-3]	N-4 No. 3	F00364	MOM	UR-500	211	NIIP-5	LC81/23		NK9810-25		
1966-024	1966 Mar 26	0331:00	1966-024A	NNS O-8	NNS O-8	S02119	USN	Scout A	S143C	V	PALC-D		LAAFB		
1966-F04	1966 Mar 27		1966-F04	Molniya-1 No 5	Molniya-1 No 5	F00370	MOM	Molniya 8K78M	N103-38	NIIP-5	LC31		NK9701-29		
1966-025	1966 Mar 30	0920:12	1966-025A	OV1-4	OV1-4S	S02121	USAF OAR	Atlas D	72D	V	ABRESB3		VCR		
			1966-025B	OV1-5	OV1-5S (BORE)	S02122	USAF OAR								
1966-026	1966 Mar 31	0541:04	1966-026A	OPS 0340	DAPP 15	S02125	USAF	Thor Burner 1	147	V	4300B6		VCR		
1966-027	1966 Mar 31	1047	1966-027A	Luna-10 DU	E-6S No. 206	A00670	MOM	Molniya 8K78M	N103-42	NIIP-5	LC31		JBIS53-319		
			1966-027A	Luna-10	E-6S No. 206 ISL	S02126	NII-88								
1966-028	1966 Apr 6	1140?	1966-028A	Kosmos-114	Zenit-4	S02133	MOM	Voskhod 11A57	U15001-02	NIIP-53	LC41/1		RAEX		
1966-029	1966 Apr 7	2202:55	1966-029A	OPS 1612	CORONA 1031	S02136	NRO/CIA	Thor SLV-2A Agena D	474	V	PALC1-1		VCR		
			1966-029	SRV 711	SRV 1031-1	A00674	NRO/CIA								
			1966-029	SRV 712	SRV 1031-2	A00676	NRO/CIA								
1966-030	1966 Apr 8	0100:02	1966-030B	Centaur AC-8	Centaur 3D	S02143	NASA LeRC	Atlas Centaur D	AC-8	CC	LC36B		TR-1022		
			1966-030A	Surveyor Model 2	Surveyor SM-2	S02139	NASA/JPL								
1966-031	1966 Apr 8	1935:00	1966-031A	OA0 1	OA0 A1	S02142	NASA GSFC	SLV-3 Agena D	5001 (AA15)	CC	LC12		TR-1022		
1966-032	1966 Apr 19	1912?	1966-032A	OPS 0910	AFP-206 [F27]	S02146	NRO/USAF	SLV-3 Agena D	7117	V	PALC2-4		RAE		
			1966-032	SRV	SRV	A00669	NRO/USAF								
1966-033	1966 Apr 20	1048?	1966-033A	Kosmos-115	Zenit-2 No. 35	S02147	MOM	Vostok 8A92	-	NIIP-5	LC31		RAE		

1966-034	1966 Apr 22 0945:00	1966-034A	OV3-1	OV3-1	S02150 USAF OAR	Scout B	S145C	V	PALC-D	LAAFB
1966-035	1966 Apr 25 0712?	1966-035A	Molniya-1	Molniya-1	S02151 MOM	Molniya 8K78M	N103-39	NIIP-5	LC31	RAE
1966-036	1966 Apr 26 1004?	1966-036A	Kosmos-116	DS-Pl-Yu No. 6	S02152 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	RAE
1966-F05	1966 May 3 1925:25	1966-F05	OPS 1508	CORONA 1032	F00372 NRO/CIA	Thor SLV-2A Agena D	465	V	75-3-5	VCR
		1966-F05	SRV 707	SRV 1032-1	F00374 NRO/CIA					
		1966-F05	SRV 708	SRV 1032-2	F00376 NRO/CIA					
1966-037	1966 May 6 1102?	1966-037A	Kosmos-117	Zenit-2 No. 39	S02163 MOM	Vostok 8A92	N15001-01	NIIP-5	LC31	RAE
1966-038	1966 May 11 1409?	1966-038A	Kosmos-118	Meteor	S02168 MOM	Vostok 8A92M	-	NIIP-5	LC31	RAE
1966-039	1966 May 14 1830?	1966-039A	OPS 1950	AFP-206 [F28]	S02171 NRO/USAF	SLV-3 Agena D	7118	V	PALC2-4	TLE
		1966-039B	OPS 6785	[EHH B4]	S02172 USAF/NSA					
		1966-039	SRV		A00681 NRO/USAF					
1966-040	1966 May 15 0755:34	1966-040A	Nimbus 2	Nimbus C	S02173 NASA GSFC	Thor SLV-2A Agena B	456 (TA6)	V	75-1-1	VCR
1966-F06	1966 May 17	1966-F06	[Kosmos]	Zenit-4	F00381 MOM	Voskhod 11A57	-	NIIP-53	LC41/1	AVMNLJ
1966-F07	1966 May 17 1515:03	1966-F07	TDA 5	TDA 5	F00379 NASA MSC	SLV-3 Agena D	5303	CC	LC14	GT9PAO
1966-041	1966 May 19 0227:00	1966-041A	NNS O-9	NNS O-9	S02176 USN	Scout A	S146C	V	PALC-D	LAAFB
1966-U02	1966 May 20 1900	1966-U02	-	OGCh	A00688 RVSN	R-360 8K69	U22502 No. 04L	NIIP-5	LC67/22	Kosmodrom9904
1966-042	1966 May 24 0200:33	1966-042A	OPS 1778	CORONA 1033	S02181 NRO/CIA	Thor SLV-2A Agena D	469	V	PALC1-1	VCR
		1966-042	SRV 717	SRV 1033-1	A00692 NRO/CIA					
		1966-042	SRV 718	SRV 1033-2	A00699 NRO/CIA					
1966-043	1966 May 24 0531?	1966-043A	Kosmos-119	DS-U2-I No. 1	S02182 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	RAE
1966-044	1966 May 25 1400:00	1966-044A	Explorer 32	AE-B	S02183 NASA GSFC	Thor Delta C1	436/D38	CC	LC17B	TR-1022
1966-045	1966 May 30 1441:01	1966-045A	Surveyor 1	Surveyor SC-1	S02185 NASA/JPL	Atlas Centaur D	AC-10	CC	LC36A	TR-1022
1966-046	1966 Jun 1 1500:02	1966-046A	ATDA	TDA 4	S02186 NASA MSC	Atlas SLV-3	5304	CC	LC14	KHR-1
1966-047	1966 Jun 3 1339:33	1966-047A	Gemini IX-A	Gemini SC9	S02191 NASA MSC	Titan II GLV	GT-9	CC	LC19	SP-4203
		1966-047	AMU Cover	AMU Cover	A00701 NASA MSC					
		1966-047	AMU	Astronaut Manuevring Unit	A00704 NASA MSC					
1966-048	1966 Jun 3 1925?	1966-048A	OPS 1577	AFP-206 [F29]	S02192 NRO/USAF	SLV-3 Agena D	7119	V	PALC2-4	TLE
		1966-048B	OPS 1856	[AAS 6]	A00696 USAF					
		1966-048	SRV		A00693 NRO/USAF					
1966-049	1966 Jun 7 0248	1966-049A	OGO 3	OGO B	S02195 NASA GSFC	SLV-3 Agena B	5601 (AA16)	CC	LC12	TR-1022
1966-050	1966 Jun 8 1102?	1966-050A	Kosmos-120	Zenit-2 No. 41	S02196 MOM	Voskhod 11A57	-	NIIP-5	LC31	RAE
1966-051	1966 Jun 9 2010?	1966-051A	FTV 1351	Midas RTS 1	S02200 USAF	SLV-3 Agena D	7201	V	PALC1-2	RAE
		1966-051B	EGRS 6	Secor 6	S02205 USA ACE					
		1966-051C	ERS 16	ORS	S02202 USAF					
1966-052	1966 Jun 10 0415	1966-052A	OV3-4	OV3-4	S02201 USAF OAR	Scout B	S147C	WI	LA3A	LAAFB
1966-053	1966 Jun 16 1400:01	1966-053B	OPS 9311	IDCSP 1	S02215 USAF	Titan IIIC	3C-11	CC	LC41	PH960801
		1966-053C	OPS 9312	IDCSP 2	S02216 USAF					
		1966-053D	OPS 9313	IDCSP 3	S02217 USAF					
		1966-053E	OPS 9314	IDCSP 4	S02218 USAF					
		1966-053F	OPS 9315	IDCSP 5	S02219 USAF					
		1966-053G	OPS 9316	IDCSP 6	S02220 USAF					
		1966-053H	OPS 9317	IDCSP 7	S02221 USAF					
		1966-053A	GGTS	GGTS	S02207 USAF					
1966-054	1966 Jun 17 1100?	1966-054A	Kosmos-121	Zenit-4	S02210 MOM	Voskhod 11A57	-	NIIP-53	LC41/1	RAEX
1966-055	1966 Jun 21 2131:30	1966-055A	OPS 1599	CORONA 1034	S02227 NRO/CIA	Thor SLV-2A Agena D	466	V	75-3-5	VCR
		1966-055	SRV 713	SRV 1034-1	A00710 NRO/CIA					
		1966-055	SRV 714	SRV 1034-2	A00713 NRO/CIA					
1966-056	1966 Jun 24 0012:02	1966-056C	Pageos canister half	Pageos canister half	S02256 NASA LaRC	Thor SLV-2A Agena D	473 (TA7)	V	75-1-1	VCR
		1966-056D	Pageos canister half	Pageos canister half	S02511 NASA LaRC					
		1966-056A	Pageos	Pageos A	S02253 NASA LaRC					
1966-057	1966 Jun 25 1030?	1966-057A	Kosmos-122	Meteor	S02254 MOM	Vostok 8A92M	N15000-21	NIIP-5	LC31	RAEX
1966-058	1966 Jul 1 1602:25	1966-058A	Explorer 33	AIMP D	S02258 NASA GSFC	Thor Delta E1	467/D39	CC	LC17A	TR-1022
1966-059	1966 Jul 5 1453:17	1966-059A	Saturn S-IVB-203	Saturn S-IVB-203	S02289 NASA MSFC	Uprated Saturn I	SA-203	CC	LC37B	SP-4205
1966-060	1966 Jul 6 1257	1966-060A	Proton-3	N-4 No. 4	S02290 MOM	UR-500	212	NIIP-5	LC81/23	NK9810-25
1966-061	1966 Jul 8 0531?	1966-061A	Kosmos-123	DS-Pl-Yu No. 5	S02295 MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1	RAE
1966-062	1966 Jul 12 1757	1966-062A	OPS 1850	AFP-206 [F30]	S02322 NRO/USAF	SLV-3 Agena D	7120	V	SLC4E	JCM
		1966-062	SRV		A00711 NRO/USAF					
1966-063	1966 Jul 14 0210:02	1966-063	OV1-7	OV1-7	F00360 USAF OAR	Atlas D	58D	V	ABRESB3	VCR
		1966-063A	PasComSat	OV1-8 PasComSat	S02324 USAF OAR					
1966-064	1966 Jul 14 1033?	1966-064A	Kosmos-124	Zenit-2 No. 42	S02325 MOM	Voskhod 11A57	N15001-14	NIIP-5	LC31	RAE
1966-065	1966 Jul 18 2039:46	1966-065A	TDA 1A	TDA 1A	S02348 NASA MSC	SLV-3 Agena D	5305	CC	LC14	SP-4203
1966-066	1966 Jul 18 2220:27	1966-066A	Gemini X	Gemini SC10	S02349 NASA MSC	Titan II GLV	GT-10	CC	LC19	SP-4203
1966-067	1966 Jul 20 0907?	1966-067A	Kosmos-125	US-A	S02351 MOM	Soyuz 11A510	G15000-02	NIIP-5	LC31	RAE
1966-068	1966 Jul 28 1048?	1966-068A	Kosmos-126	Zenit-4	S02368 MOM	Voskhod 11A57	N15001-01	NIIP-5	LC31	RAE
1966-069	1966 Jul 29 1843?	1966-069A	OPS 3014	KH8-1 GAMBIT	S02376 NRO/USAF	Titan IIIB	3B-1	V	SLC4W	RAE
		1966-069	SRV-1	SRV-1	A00724 NRO/USAF					
		1966-069	SRV-2	SRV-2	A00726 NRO/USAF					
1966-070	1966 Aug 4 1045:01	1966-070A	OV3-3	OV3-3	S02389 USAF OAR	Scout B	S148C	V	SLC5	LAAFB
1966-071	1966 Aug 8 1116?	1966-071A	Kosmos-127	Zenit-4	S02391 MOM	Voskhod 11A57	N15001-13	NIIP-5	LC31	RAE
1966-072	1966 Aug 9 2046:03	1966-072A	OPS 1545	CORONA 1036	S02393 NRO/CIA	Thorad SLV-2G Agena D	506	V	SLC1W	VCR
		1966-072	SRV 715	SRV 1036-1	A00733 NRO/CIA					
		1966-072	SRV 716	SRV 1036-2	A00738 NRO/CIA					
1966-073	1966 Aug 10 1926:00	1966-073A	Lunar Orbiter I	Lunar Orbiter A	S02394 NASA LaRC	SLV-3 Agena D	5801 (AA17)	CC	LC13	TR-1022
1966-074	1966 Aug 16 1830?	1966-074A	OPS 1832	AFP-206 [F31]	S02396 NRO/USAF	SLV-3 Agena D	7121	V	SLC4E	TLE
		1966-074B	OPS 6810	[EHH B5]	S02397 USAF/NSA					
		1966-074	SRV		A00727 NRO/USAF					
1966-075	1966 Aug 17 1520:17	1966-075A	Pioneer 7	Pioneer B	S02398 NASA ARC	Thor Delta E1	462/D40	CC	LC17A	TR-1022
1966-076	1966 Aug 18 0225:02	1966-076A	NNS O-10	NNS O-10	S02401 USN	Scout A	S149C	V	SLC5	LAAFB
1966-077	1966 Aug 19 1926?	1966-077A	FTV 1352	Midas RTS 2	S02403 USAF	SLV-3 Agena D	7202	V	SLC3E	RAE
		1966-077B	EGRS 7	Secor 7	S02411 USA ACE					
		1966-077C	ERS 15	ERS 15	S02412 USAF					
1966-078	1966 Aug 24 0803	1966-078A	Luna-11	E-6LF No. 101	S02406 MOM	Molniya 8K78M	N103-43	NIIP-5	LC31?	JBIS53-319

1966-F08	1966 Aug 26 1359:56	1966-F08 1966-F08 1966-F08 1966-F08 1966-F08 1966-F08 1966-F08 1966-F08 1966-F08 1966-F08	IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP	IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP IDCSP	F00384 USAF F00385 USAF F00386 USAF F00387 USAF F00388 USAF F00389 USAF F00390 USAF F00391 USAF F00391 USAF S02409 MOM	Titan IIIC	3C-12	CC	LC41	PH960801
1966-079	1966 Aug 27 0950:07	1966-079A	Kosmos-128	Zenit-4	S02414 NASA MSC	Vokhod 11A57	N15001-03	NIIP-5	LC1?	RAE
1966-080	1966 Sep 12 1305:02	1966-080A	TDA 6	TDA 6	S02415 NASA MSC	SLV-3 Agena D	5306	CC	LC14	KHR-1
1966-081	1966 Sep 12 1442:27	1966-081A	Gemini XI	Gemini SC11	S02415 NASA MSC	Titan II GLV	GT-11	CC	LC19	SP-4203
1966-F09	1966 Sep 16	1966-F09	[Kosmos]	Zenit-2 No. 40	F00393 MOM	Vostok 8A92	-	NIIP-5	LC31	NK96-10-65
1966-082	1966 Sep 16 0436:09	1966-082A	OPS 6026	DAPP 1416 (FTV-3)	S02418 USAF	Thor Burner 2	167	V	4300B6	SAC7383
1966-083	1966 Sep 16 1759	1966-083A 1966-083B 1966-083	OPS 1686 OPS 6874 SRV	AFP-206 [F32] [EHH B6] SRV	S02419 NRO/USAF S02420 USAF/NSA A00728 NRO/USAF S02437 RVSN	SLV-3 Agena D	7123	V	SLC4E	JCM
1966-088	1966 Sep 17 2235	1966-088A	-	OGCh	S02425 NASA/JPL	R-360 8K69	U22502 No. 05L	NIIP-5	LC162/36	Kosmodrom9904
1966-084	1966 Sep 20 1232	1966-084A	Surveyor 2	Surveyor SC-2	S02427 NRO/CIA	Atlas Centaur D	AC-7	CC	LC36A	TR-1022
1966-085	1966 Sep 20 2114:05	1966-085A 1966-085 1966-085	OPS 1703 SRV 723 SRV 724	CORONA 1035 SRV 1035-1 SRV 1035-2	A00753 NRO/CIA A00761 NRO/CIA F00396 ISAS	Thor SLV-2A Agena D	477	V	SLC3W	VCR
1966-F10	1966 Sep 26 0258	1966-F10	L-4S-1	L-4S-1	S02433 NRO/USAF	Lambda 4S	L-4S-1	KASC	L	MR661017-34
1966-086	1966 Sep 28 1912	1966-086A 1966-086 1966-086 1966-086	OPS 4096 SRV-1 SRV-2	KH8-2 GAMBIT SRV-1 SRV-2	A00756 NRO/USAF A00758 NRO/USAF S02435 ESSA	Titan IIIB	3B-2	V	SLC4W	JCM
1966-087	1966 Oct 2 1039:03	1966-087A	ESSA 3	TOS A	S02481 USAF	Thor Delta E	463/D41	V	SLC2E	TR-1022
1966-089	1966 Oct 5 2200	1966-089A 1966-089B	FTV 1353 EGRS 8	Midas RTS 3 Secor 8	S02485 USAF S02520 USA ACE	SLV-3 Agena D	7203	V	SLC3E	JCM
1966-090	1966 Oct 12 1915	1966-090A 1966-090B 1966-090	OPS 2055 OPS 5345 SRV	AFP-206 [F33] SGLS 1 SRV	S02489 NRO/USAF A00763 USAF A00759 NRO/USAF	SLV-3 Agena D	7122	V	SLC4E	JCM
1966-091	1966 Oct 14 1213:08	1966-091A	Kosmos-129	Zenit-2 No. 33	S02491 MOM	Vostok 8A92	-	NIIP-53	LC41/1	NK96-10-65
1966-092	1966 Oct 20 0755:27	1966-092A	Molniya-1	Molniya-1	S02501 MOM	Molniya 8K78M	N103-40	NIIP-5	LC1	RAE
1966-093	1966 Oct 20 0852:27	1966-093A	Kosmos-130	Zenit-4	S02502 MOM	Vokhod 11A57	N15001-04	NIIP-5	LC31	RAE
1966-094	1966 Oct 22 0842	1966-094A	Luna-12	E-6LF No. 102	S02508 MOM	Molniya 8K78M	N103-44	NIIP-5	LC31	JBIS53-319
1966-095	1966 Oct 26 1112:02	1966-095B 1966-095A	Centaur D AC-9 Surveyor Model 3	Centaur 8D Surveyor SM-3	S02513 NASA LeRC S02512 NASA/JPL	Atlas Centaur D	AC-9	CC	LC36B	TR-1022
1966-096	1966 Oct 26 2305:00	1966-096A	Intelsat II F-1	Intelsat II F-1	S02514 Intelsat	Thor Delta E1	464/D42	CC	LC17B	TR-1022
1966-097	1966 Oct 28 1156:02	1966-097A	OV3-2	OV3-2	S02517 USAF OAR	Scout B	S150C	V	SLC5	LAAFB
1966-101	1966 Nov 2 0050	1966-101AS	-	OGCh	S02931 RVSN	R-360 8K69	N22500 No. 06L	NIIP-5	LC162/36	Kosmodrom9904
1966-098	1966 Nov 2 2023	1966-098A 1966-098B 1966-098	OPS 2070 OPS 5424 SRV	AFP-206 [F34] Agena Pickaback SRV	S02523 NRO/USAF A00774 USAF A00771 NRO/USAF	SLV-3 Agena D	7124	V	SLC4E	JCM
1966-099	1966 Nov 3 1350:42	1966-099A 1966-099 1966-099B 1966-099D 1966-099C	OV4-3 Gemini B OV4-1R OV4-1T OV1-6S	OV4-3 Gemini SC2B OV4-1R OV4-1T OV1-6S	S02524 USAF A00778 USAF S02526 USAF S02528 USAF S02527 USAF	Titan IIIC	3C-9	CC	LC40	OMNS-T3C-9
1966-099	1966 Nov 3 1350:42	1966-099A	Gemini B	Gemini SC2B	A00778 USAF	Titan IIIC	3C-9	CC	LC40	OMNS-T3C-9
1966-100	1966 Nov 6 2321:00	1966-100A	Lunar Orbiter 2	Lunar Orbiter B	S02534 NASA LaRC	SLV-3 Agena D	5802 (AA18)	CC	LC13	TR-1022
1966-102	1966 Nov 8 1953:02	1966-102A 1966-102 1966-102 1966-102	OPS 1866 SRV 1037-1 SRV 727 SRV 728	CORONA 1037 SRV 1037-1 SRV 1037-2 TDA 7A	S02537 NRO/CIA A00782 NRO/CIA A00786 NRO/CIA S02565 NASA MSC	Thorad SLV-2G Agena D	507	V	SLC1W	VCR
1966-103	1966 Nov 11 1907:59	1966-103A	Gemini XII	Gemini SC12	S02566 NASA MSC	SLV-3 Agena D	5307	CC	LC14	GT12PAO
1966-104	1966 Nov 11 2046:33	1966-104A	Kosmos-131	Zenit-4	S02568 MOM	Titan II GLV	GT-12	CC	LC19	SP-4203
1966-105	1966 Nov 12 0950:27	1966-105A	Kosmos-131	Zenit-4	S02568 MOM	Vokhod 11A57	-	NIIP-53	LC41/1	RAEX
1966-F11	1966 Nov 16 1300	1966-F11	Kosmos	Strela-2	F00398 MO SSSR	Kosmos 11K65	-	NIIP-5	LC41/15	AVMNLJ
1966-106	1966 Nov 19 0809:27	1966-106A	Kosmos-132	Zenit-2 No. 46	S02599 MOM	Vostok 8A92	N15001-08	NIIP-5	LC31	RAE
1966-107	1966 Nov 28 1100:27	1966-107A	Kosmos-133	Soyuz 7K-OK No. 2	S02601 MOM	Soyuz 11A511	U15000-02	NIIP-5	LC31	RAEX
1966-108	1966 Dec 3 0809:27	1966-108A	Kosmos-134	Zenit-4	S02603 MOM	Vokhod 11A57	N15001-06	NIIP-5	LC31	RAE
1966-109	1966 Dec 5 2109	1966-109A 1966-109	OPS 1890 SRV	AFP-206 [F35] SRV	S02606 NRO/USAF A00789 NRO/USAF	SLV-3 Agena D	7125	V	SLC4E	JCM
1966-110	1966 Dec 7 0212:01	1966-110A	ATS 1	ATS B	S02608 NASA GSFC	SLV-3 Agena D	5101 (AA19)	CC	LC12	TR-1022
1966-111	1966 Dec 11 2109:57	1966-111A 1966-111B	OV1-9 OV1-10	OV1-9 OV1-10	S02610 USAF OAR S02611 USAF OAR	Atlas D	89D	V	ABRESB3	VCR
1966-112	1966 Dec 12 2038:27	1966-112A	Kosmos-135	DS-U2-MP No. 1	S02612 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	RAE
1966-F12	1966 Dec 14	1966-F12	[Soyuz]	Soyuz No. 1	F00400 MOM	Soyuz 11A511	U15000-01	NIIP-5	LC31	AVMNLJ
1966-113	1966 Dec 14 1814	1966-113A 1966-113 1966-113	OPS 8968 SRV-1 SRV-2	KH8-3 GAMBIT SRV-1 SRV-2	S02618 NRO/USAF A00797 NRO/USAF A00799 NRO/USAF	Titan IIIB	3B-3	V	SLC4W	JCM
1966-114	1966 Dec 14 1920:03	1966-114C 1966-114A	Biosatellite 1 Biosatellite 1 Capsule	Biosatellite A Adapter Biosatellite A SRV	S02631 NASA ARC S02632 NASA ARC	Thor Delta G	471/D43	CC	LC17A	TR-1022
1966-115	1966 Dec 19 1200:01	1966-115A	Kosmos-136	Zenit-2 No. 47	S02624 MOM	Vostok 8A92	-	NIIP-53	LC41/1	NK96-10-65
1966-F13	1966 Dec 20 0220	1966-F13	L-4S-2	L-4S-2	F00402 ISAS	Lambda 4S	L-4S-2	KASC	L	JCM
1966-116	1966 Dec 21 1017	1966-116A 1966-116A	ALS Luna-13	E-6M No. 205 SA E-6M No. 205	S02626 NII-88 A00802 MOM	Molniya 8K78M	N103-45	NIIP-5	LC1	JBIS53-319
1966-117	1966 Dec 21 1312:27	1966-117A	Kosmos-137	DS-U2-D No. 1	S02627 MO SSSR	Kosmos 63S1	-	GTSP-4	LC86/1	RAE
1966-118	1966 Dec 29 1200:06	1966-118A	OPS 1584	Ferret 10	S02634 USAF/NSA	Thor SLV-2A Agena D	459	V	SLC2W	VCR
1967-001	1967 Jan 11 1055:00	1967-001A	Intelsat II F-2	Intelsat II F-2	S02639 INTELSAT	Thor Delta E1	468/D44	CC	LC17B	TR-1022
1967-002	1967 Jan 14 2128:21	1967-002A 1967-002	OPS 1664 SRV 719	CORONA 1038 SRV 1038-1	S02642 NRO/CIA A00812 NRO/CIA	Thor SLV-2A Agena D	495	V	SLC3W	VCR

1967-003	1967 Jan 18 1419:08	1967-002 1967-003A 1967-003B 1967-003C 1967-003D 1967-003E 1967-003F 1967-003G 1967-003H	SRV 720 OPS 9321 OPS 9322 OPS 9323 OPS 9324 OPS 9325 OPS 9326 OPS 9327 OPS 9328	SRV 1038-2 IDCSP 8 IDCSP 9 IDCSP 10 IDCSP 11 IDCSP 12 IDCSP 13 IDCSP 14 IDCSP 15	A00815 NRO/CIA S02645 USAF S02649 USAF S02650 USAF S02651 USAF S02652 USAF S02653 USAF S02654 USAF S02655 USAF	Titan IIIC	3C-13	CC	LC41	PH960801
1967-004	1967 Jan 19 1239:59	1967-004A	Kosmos-138	Zenit-2 No. 43	S02646 MOM	Vostok 8A92	-	NIIP-53	LC41/1	NK96-10-65
1967-005	1967 Jan 25 1355	1967-005A	Kosmos-139	OGCh	S02656 RVSN	R-360 8K69	N22500 No. 07L	NIIP-5	LC162/36	Kosmodrom9904
1967-006	1967 Jan 26 1731	1967-006A	ESSA 4	TOS B	S02657 ESSA	Thor Delta E	472/D45	V	SLC2E	TR-1022
1967-F01	1967 Jan 31 1245:01	1967-F01	OV3-5	OV3-5	F00404 USAF OAR	Scout B	S151C	V	SLC5	LAAFB
1967-007	1967 Feb 2 2000	1967-007A	OPS 4399	AFP-206 [F36]	S02664 NRO/USAF	SLV-3 Agena D	7126	V	SLC4E	LR670203
1967-008	1967 Feb 5 0117:01	1967-008A	SRV	SRV	A00817 NRO/USAF					
1967-009	1967 Feb 7 0320	1967-009A	Lunar Orbiter 3	Lunar Orbiter C	S02666 NASA LaRC	SLV-3 Agena D	5803 (AA20)	CC	LC13	TR-1022
1967-010	1967 Feb 8 0800:52	1967-010A	Kosmos-140	Soyuz No. 3	S02667 MOM	Soyuz 11A511	U15000-03	NIIP-5	LC1	NK9703-56
1967-011	1967 Feb 8 0939:39	1967-011A	OPS 6073	DAPP 2418 (FTV-2)	S02669 USAF	Thor Burner 2	169	V	4300B6	SAC7383
1967-012	1967 Feb 8 1019?	1967-012A	Diademe D-1C	Diademe D-1C	S02674 CNES	Diamant A	No. 3	HMG	Brigitte	Tiziou
1967-013	1967 Feb 14 1004:56	1967-013A	Kosmos-141	Zenit-4	S02670 MOM	Voskhod 11A57	-	NIIP-53	LC41/1	RAEX
1967-014	1967 Feb 15 1006:57	1967-014A	Kosmos-142	DS-U2-I No. 2	S02678 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	AVMDS
1967-015	1967 Feb 22 2202:15	1967-015A	Diademe D-1D	Diademe D-1D	S02680 CNES	Diamant A	No. 4	HMG	Brigitte	Tiziou
		1967-015A	OPS 4750	CORONA 1039	S02686 NRO/CIA	Thor SLV-2A Agena D	493	V	SLC3W	VCR
		1967-015	SRV 729	SRV 1039-1	A00830 NRO/CIA					
		1967-015	SRV 730	SRV 1039-2	A00832 NRO/CIA					
1967-016	1967 Feb 24 1955?	1967-016A	OPS 4204	KH8-4 GAMBIT	S02687 NRO/USAF	Titan IIIB	3B-4	V	SLC4W	RAE
		1967-016	SRV-1	SRV-1	A00826 NRO/USAF					
		1967-016	SRV-2	SRV-2	A00828 NRO/USAF					
1967-017	1967 Feb 27 0845:01	1967-017A	Kosmos-143	Zenit-2 No. 45	S02693 MOM	Vostok 8A92	U15001-03	NIIP-5	LC1	NK96-10-65
1967-018	1967 Feb 28 1434:59	1967-018A	Kosmos-144	Meteor No. 6	S02695 MOM	Vostok 8A92M	-	NIIP-53	LC41/1	PL-WWW
1967-019	1967 Mar 3 0644:58	1967-019A	Kosmos-145	DS-U2-M No. 2	S02697 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	AVMDS
1967-020	1967 Mar 8 1612:00	1967-020A	OSO 3	OSO 1	S02703 NASA GSFC	Thor Delta C	431/D46	CC	LC17A	TR-1022
1967-021	1967 Mar 10 1130:33	1967-021A	Kosmos-146	L-1 No. 2P	S02705 MOM	UR-500K/Blok D	N10722701	NIIP-5	LC81/23	NK9810-25
1967-022	1967 Mar 13 1210:23	1967-022A	Kosmos-147	Zenit-2 No. 44	S02710 MOM	Vostok 8A92	-	NIIP-53	LC41/1	NK96-10-65
1967-023	1967 Mar 16 1730	1967-023A	Kosmos-148	DS-P1-I No. 2	S02712 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1967-024	1967 Mar 21 1007	1967-024A	Kosmos-149	DS-MO No. 1	S02714 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	AVMDS
1967-025	1967 Mar 22 1244:59	1967-025A	Kosmos-150	Zenit-4	S02715 MOM	Voskhod 11A57	-	NIIP-53	LC41/1	RAE
1967-F02	1967 Mar 22 1405	1967-F02	[Kosmos]	OGCh	F00408 RVSN	R-360 8K69	N22500 No. 08L	NIIP-5	LC161/35	Kosmodrom9904
1967-026	1967 Mar 23 0130:12	1967-026A	Intelsat II F-3	Intelsat II F-3	S02717 INTELSAT	Thor Delta E1	470/D47	CC	LC17B	TR-1022
1967-027	1967 Mar 24 1150?	1967-027A	Kosmos-151	Strela-2	S02720 MO SSSR	Kosmos 11K65	-	NIIP-5	LC41/15	RAEX
1967-028	1967 Mar 25 0659:30	1967-028A	Kosmos-152	DS-P1-Yu No. 7	S02722 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1967-029	1967 Mar 30 1854:23	1967-029A	OPS 4779	CORONA 1040	S02736 NRO/CIA	Thor SLV-2A Agena D	501	V	SLC3W	VCR
		1967-029	SRV 721	SRV 1040-1	A00843 NRO/CIA					
		1967-029	SRV 722	SRV 1040-2	A00847 NRO/CIA					
1967-030	1967 Apr 4 1400:02	1967-030A	Kosmos-153	Zenit-2 No. 48	S02740 MOM	Vostok 8A92	-	NIIP-53	LC41/1	NK96-10-65
1967-031	1967 Apr 6 0323:01	1967-031A	ATS 2	ATS A	S02743 NASA GSFC	SLV-3 Agena D	5102 (AA21)	CC	LC12	TR-1022
		1967-031B	Research Payload Module 481	Module 481	A00844 USAF					
1967-032	1967 Apr 8 0900:33	1967-032C	Kosmos-154	L-1 No. 3P	S02746 MOM	Proton-K/D	228-01	NIIP-5	LC81/23	NK9708-59
1967-033	1967 Apr 12 1051?	1967-033A	Kosmos-155	Zenit-4	S02750 MOM	Voskhod 11A57	N15001-08	NIIP-5	LC1	RAEX
1967-F03	1967 Apr 13	1967-F03	L-4S-3	L-4S-3	F00410 ISAS	Lambda 4S	L-4S-3	KASC	L	SP-4008
1967-034	1967 Apr 14 0325:00	1967-034A	NNS O-12	NNS O-12	S02754 USN	Scout A	S154C	V	SLC5	LAAFB
1967-035	1967 Apr 17 0705:01	1967-035A	Surveyor 3	Surveyor SC-3	S02756 NASA/JPL	Atlas Centaur D	AC-12	CC	LC36B	TR-1022
1967-036	1967 Apr 20 1121:10	1967-036A	ESSA 5	TOS C	S02757 ESSA	Thor Delta E	484/D48	V	SLC2E	TR-1022
1967-037	1967 Apr 23 0035:00	1967-037A	Soyuz-1	Soyuz No. 4	S02759 MOM	Soyuz 11A511	U15000-04	NIIP-5	LC1	JCM
1967-038	1967 Apr 26 1006:24	1967-038A	San Marco 2	San Marco B	S02761 CRS	Scout B	S153C	V	SLC5	LAAFB
1967-F04	1967 Apr 26 1800	1967-F04	OPS 4243	KH8-5 GAMBIT	F00412 NRO/USAF	Titan IIIB	3B-5	V	SLC4W	LR670426
		1967-F04	SRV-1	SRV-1	F00414 NRO/USAF					
		1967-F04	SRV-2	SRV-2	F00416 NRO/USAF					
1967-039	1967 Apr 27 1250:02	1967-039A	Kosmos-156	Meteor	S02762 MOM	Vostok 8A92M	-	NIIP-53	LC41/1	PL-WWW
1967-040	1967 Apr 28 1001:01	1967-040C	ERS 18	ERS 18	S02767 USAF	Titan IIIC	3C-10	CC	LC41	PH960801
		1967-040D	ERS 20	OV5-3	S02768 USAF					
		1967-040E	ERS 27	OV5-1	S02769 USAF					
		1967-040A	Vela 4A	Vela 4A	S02765 USAF					
		1967-040B	Vela 4B	Vela 4B	S02766 USAF					
1967-041	1967 May 4 2225:00	1967-041A	Lunar Orbiter 4	Lunar Orbiter D	S02772 NASA LaRC	SLV-3 Agena D	5804 (AA22)	CC	LC13	NASA-TM-X-
1967-042	1967 May 5 1600:01	1967-042A	Ariel 3	UK-3 (UK-E)	S02773 UK SRC	Scout A	S155C	V	SLC5	LAAFB
1967-043	1967 May 9 2150:42	1967-043A	OPS 4696	CORONA 1041	S02779 NRO/CIA	Thorad SLV-2G Agena D	508	V	SLC1E	VCR
		1967-043	SRV 731	SRV 1041-1	A00867 NRO/CIA					
		1967-043	SRV 732	SRV 1041-2	A00872 NRO/CIA					
		1967-043B	OPS 1967	EHH B7	S02780 USAF/NSA					
1967-044	1967 May 12 1030:01	1967-044A	Kosmos-157	Zenit-2 No. 49	S02781 MOM	Vostok 8A92	-	NIIP-5	LC1	NK96-10-65
1967-045	1967 May 15 1100?	1967-045A	Kosmos-158	Tsiklon GVM	S02801 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC1	RAEX
1967-046	1967 May 16 2143:57	1967-046A	Kosmos-159	E-6LS No. 111	S02805 MOM	Molniya 8K78M	Ya716-56	NIIP-5	LC1	JBIS53-319
1967-047	1967 May 17 1605	1967-047A	Kosmos-160	OGCh	S02806 RVSN	R-360 8K69	Ya22500 No. 09L	NIIP-5	LC161/35	Kosmodrom9904
1967-048	1967 May 18 0905:01	1967-048A	NNS O-13	NNS O-13	S02807 USN	Scout A	S156C	V	SLC5	LAAFB
1967-049	1967 May 22 1400?	1967-049A	Kosmos-161	Zenit-4	S02812 MOM	Voskhod 11A57	-	NIIP-53	LC41/1	RAEX
1967-050	1967 May 22 1830	1967-050A	OPS 4321	AFP-206 [F37]	S02813 NRO/USAF	SLV-3 Agena D	7127	V	SLC4E	JCM
		1967-050B	OPS 5557	LOGACS	A00869 USAF					
		1967-050	SRV	SRV	A00858 NRO/USAF					
1967-051	1967 May 24 1405:54	1967-051A	IMP 4	IMP F	S02817 NASA GSFC	Thor Delta E1	486/D49	V	SLC2E	LR670524
1967-052	1967 May 24 2250?	1967-052A	Molniya-1	Molniya-1	S02822 MOM	Molniya 8K78M	-	NIIP-5	LC1	RAEX



1967-F05	1967 May 30 0206:00	1967-F05	ESRO 2A	ESRO 2A	F00418 ESRO ESTEC	Scout B	S152C	V	SLC5	LAAFB
1967-053	1967 May 31 0930:48	1967-053F	Calsphere III	NRL PL159	S02872 NRL	Thor SLV-2 Agena D	443	V	SLC2W	VCR
		1967-053A	Calsphere IV	NRL PL160	S02826 NRL					
		1967-053E	Timation 1	Timation 1	S02847 NRL					
		1967-053C	GGSE 4	NRL PL151?	S02828 NRL					
		1967-053G	NRL PL152	NRL PL152	S02873 NRL					
		1967-053H	NRL PL153	NRL PL153	S02874 NRL					
		1967-053D	GGSE 5	NRL PL154?	S02834 NRL					
		1967-053J	NRL PL150B	NRL PL150B	S02909 NRL					
1967-054	1967 Jun 1 1040?	1967-054A	Kosmos-162	Zenit-4	S02827 MOM	Voskhod 11A57	Ya15001-11	NIIP-5	LC1	RAEX
1967-055	1967 Jun 4 1810?	1967-055A	OPS 4360	AFP-206 [F38]	S02831 NRO/USAF	SLV-3 Agena D	7128	V	SLC4E	TLE
		1967-055	SRV	SRV	A00874 NRO/USAF					
1967-056	1967 Jun 5 0503	1967-056A	Kosmos-163	DS-U2-MP No. 2	S02832 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	AVMDS
1967-057	1967 Jun 8 1300:01	1967-057A	Kosmos-164	Zenit-2 No. 50	S02836 MOM	Voskhod 11A57	Ya15001-13	NIIP-53	LC41/1	NK96-10-65
1967-058	1967 Jun 12 0239:45	1967-058	Spuskaemiy apparat Veneri-4	SA	A00936 MOM	Molniya 8K78M	-	NIIP-5	LC1	Glazami
		1967-058A	Venera-4	4V-1 No. 310	S02840 MOM					
		1967-059A	Kosmos-165	DS-P1-Yu No. 11	S02842 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1967-060	1967 Jun 14 0601:00	1967-060A	Mariner 5	Mariner 67-2	S02845 NASA/JPL	SLV-3 Agena D	5401 (AA23)	CC	LC12	TR-1022
1967-061	1967 Jun 16 0444	1967-061A	Kosmos-166	DS-U3-S No. 1	S02848 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/1	AVMDS
1967-062	1967 Jun 16 2135:22	1967-062A	OPS 3559	CORONA 1042	S02850 NRO/CIA	Thorad SLV-2G Agena D	509	V	SLC1W	VCR
		1967-062	SRV 725	SRV 1042-1	A00888 NRO/CIA					
		1967-062	SRV 726	SRV 1042-2	A00890 NRO/CIA					
		1967-062B	OPS 1873	EHH B8	S02851 USAF/NSA					
1967-063	1967 Jun 17 0236:38	1967-063A	Spuskaemiy apparat	SA	S02852 MOM	Molniya 8K78M	-	NIIP-5	LC1	NK9701-29
		1967-063A	Kosmos-167	4V-1 No. 311	A00881 MOM					
		1967-F06	[Kosmos]	Zenit-4	F00420 MOM	Voskhod 11A57	-	NIIP-53	LC41/1	AVMNLJ
1967-064	1967 Jun 20 1619?	1967-064A	OPS 4282	KH8-6 GAMBIT	S02858 NRO/USAF	Titan IIB	3B-8	V	SLC4W	RAE
		1967-064	SRV-1	SRV-1	A00884 NRO/USAF					
		1967-064	SRV-2	SRV-2	A00886 NRO/USAF					
1967-F07	1967 Jun 26	1967-F07	Kosmos	Tselina-O GVM	F00423 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/2	AVMNLJ
1967-065	1967 Jun 29 2101:44	1967-065B	Aurora 1	Aurora 1	S02876 USN	Thor Burner 2	171	V	LE-6	SAC7383
		1967-065A	EGRS 9	Secor 9	S02861 USA ACE					
1967-066	1967 Jul 1 1315:01	1967-066A	OPS 9331	IDCSP 16	S02862 USAF	Titan IIIC	3C-14	CC	LC41	PH960801
		1967-066B	OPS 9332	IDCSP 17	S02863 USAF					
		1967-066C	OPS 9333	IDCSP 18	S02864 USAF					
		1967-066D	OPS 9334	IDCSP 19/DATS	S02865 USAF					
		1967-066E	LES 5	LES 5	S02866 USAF					
		1967-066F	DODGE	DODGE	S02867 USN NASC					
1967-067	1967 Jul 4 0559:59	1967-067A	Kosmos-168	Zenit-2 No. 52	S02869 MOM	Voskhod 11A57	Ya15001-05	NIIP-5	LC31	NK96-10-65
1967-068	1967 Jul 14 1153:29	1967-068A	Surveyor 4	Surveyor SC-4	S02875 NASA/JPL	Atlas Centaur D	AC-11	CC	LC36A	TR-1022
1967-069	1967 Jul 17 1645	1967-069A	Kosmos-169	OGCh	S02878 RVSN	R-360 8K69	Ya22500 No. 11L	NIIP-5	LC162/36	Kosmodrom9904
1967-070	1967 Jul 19 1419:02	1967-070A	Explorer 35	AIMP E	S02884 NASA GSFC	Thor Delta E1	488/D50	CC	LC17B	TR-1022
1967-F08	1967 Jul 21	1967-F08	[Kosmos]	Zenit-4	F00425 MOM	Voskhod 11A57	Ya15001-14	NIIP-5	LC31	AVMNLJ
1967-071	1967 Jul 25 0348:10	1967-071A	OPS 1879	Ferret 11	S02890 USAF/NSA	Thor SLV-2A Agena D	496	V	SLC2W	VCR
1967-072	1967 Jul 27 1900:03	1967-072A	OV1-86	OV1-8S	S02893 USAF OAR	Atlas D	92D	V	ABRESB3	VCR
		1967-072	OV1-11	OV1-11S	F00518 USAF OAR					
		1967-072D	OV1-12	OV1-12S	S02901 USAF OAR					
1967-073	1967 Jul 28 1421:07	1967-073A	OGO 4	OGO 4 (NASA S-50A)	S02895 NASA GSFC	Thor SLV-2A Agena D	478 (TA8)	V	SLC2E	VCR
1967-074	1967 Jul 31 1645	1967-074A	Kosmos-170	OGCh	S02902 RVSN	R-360 8K69	Ya22500 No. 12L	NIIP-5	LC161/35	Kosmodrom9904
1967-075	1967 Aug 1 2233:00	1967-075A	Lunar Orbiter 5	Lunar Orbiter E	S02907 NASA LaRC	SLV-3 Agena D	5805 (AA24)	CC	LC13	TR-1022
1967-076	1967 Aug 7 2144	1967-076A	OPS 4827	CORONA 1043	S02910 NRO/CIA	Thorad SLV-2G Agena D	510	V	SLC1E	PER
		1967-076	SRV 735	SRV 1043-1	A00905 NRO/CIA					
		1967-076	SRV 736	SRV 1043-2	A00913 NRO/CIA					
		1967-077A	Kosmos-171	OGCh	S02911 RVSN	R-360 8K69	Ya22500 No. 10L	NIIP-5	LC162/36	Kosmodrom9904
1967-078	1967 Aug 9 0545?	1967-078A	Kosmos-172	Zenit-4	S02914 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1967-079	1967 Aug 16 1702?	1967-079A	OPS 4886	KH8-7 GAMBIT	S02919 NRO/USAF	Titan IIB	3B-9	V	SLC4W	RAE
		1967-079	SRV-1	SRV-1	A00908 NRO/USAF					
		1967-079	SRV-2	SRV-2	A00910 NRO/USAF					
1967-080	1967 Aug 23 0441:04	1967-080A	OPS 7202	DAPP 3419 (FTV-4)	S02920 USAF	Thor Burner 2	266	V	LE-6	SAC7383
1967-081	1967 Aug 24 0459:49	1967-081A	Kosmos-173	DS-P1-Yu No. 8	S02921 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1967-082	1967 Aug 31 0800?	1967-082A	Kosmos-174	Molniya-1Yu	S02925 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1967-F09	1967 Sep 1 1030	1967-F09	[Kosmos]	Zenit-2 No. 51	F00428 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1967-083	1967 Sep 7 2204:26	1967-083A	Biosatellite 2	Biosatellite B Adapter	S02935 NASA ARC	Thor Delta G	475/D51	CC	LC17B	TR-1022
		1967-083	Biosatellite 2 Capsule	Biosatellite B SRV	A00917 NASA ARC					
1967-084	1967 Sep 8 0757:01	1967-084A	Surveyor 5	Surveyor 5	S02937 NASA/JPL	SLV-3C Centaur	AC-13	CC	LC36B	TR-1022
1967-085	1967 Sep 11 1030?	1967-085A	Kosmos-175	Zenit-4	S02939 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1967-086	1967 Sep 12 1700	1967-086A	Kosmos-176	DS-P1-Yu No. 10	S02942 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1967-087	1967 Sep 15 1941	1967-087A	OPS 5089	CORONA 1101	S02946 NRO/CIA	Thorad SLV-2G Agena D	512	V	SLC1W	PER
		1967-087	SRV 803	SRV 1101-1	A00927 NRO/CIA					
		1967-087	SRV 804	SRV 1101-2	A00931 NRO/CIA					
1967-088	1967 Sep 16 0606:00	1967-088A	Kosmos-177	Zenit-2 No. 53	S02947 MOM	Voskhod 11A57	-	NIIP-5	-	NK96-10-65
1967-089	1967 Sep 19 1445	1967-089A	Kosmos-178	OGCh	S02951 RVSN	R-360 8K69	Ya22500 No. 14L	NIIP-5	LC161/35	Kosmodrom9904
1967-090	1967 Sep 19 1828?	1967-090A	OPS 4941	KH8-8 GAMBIT	S02952 NRO/USAF	Titan IIB	3B-10	V	SLC4W	RAE
		1967-090	SRV-1	SRV-1	A00923 NRO/USAF					
		1967-090	SRV-2	SRV-2	A00925 NRO/USAF					
1967-091	1967 Sep 22 1405	1967-091A	Kosmos-179	OGCh	S02962 RVSN	R-360 8K69	Ya22500 No. 15L	NIIP-5	LC162/36	Kosmodrom9904
1967-092	1967 Sep 25 0825:00	1967-092A	NNS O-14	NNS O-14	S02965 USN	Scout A	S157C	V	SLC5	VCR
1967-093	1967 Sep 26 1020	1967-093A	Kosmos-180	Zenit-2 No. 54	S02966 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1967-F10	1967 Sep 27	1967-F10	Kosmos	Tsiklon GVM	F00436 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/2	AVMNLJ
1967-F11	1967 Sep 27 2211:54	1967-F11	[Zond-4]	L-1 No. 4L	F00434 MOM	Proton-K/D	229-01	NIIP-5	LC81/23	NK9810-25
1967-094	1967 Sep 28 0045:00	1967-094A	Intelsat II F-4	Intelsat II F-4	S02969 INTELSAT	Thor Delta E1	442/D52	CC	LC17B	TR-1022
1967-095	1967 Oct 3 0500?	1967-095A	Molniya-1	Molniya-1	S02973 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX

1967-096	1967 Oct 11 0757:56	1967-096A	OPS 1264	DAPP 4417 (FTV-5)	S02980 USAF	Thor Burner 2	268	V	LE-6	SAC7383
1967-097	1967 Oct 11 1130:04	1967-097A	Kosmos-181	Zenit-2 No. 55	S02981 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1967-098	1967 Oct 16 0800?	1967-098A	Kosmos-182	Zenit-4	S02995 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1967-099	1967 Oct 18 1330	1967-099A	Kosmos-183	OGCh	S03001 RVSN	R-360 8K69	Ya22500 No. 16L	NIIP-5	LC161/35	Kosmodrom9904
1967-100	1967 Oct 18 1558:00	1967-100A	OSO 4	OSO D	S03000 NASA GSFC	Thor Delta C1	490/D53	CC	LC17B	TR-1022/TLE
1967-101	1967 Oct 22 0840?	1967-101A	Molniya-1	Molniya-1	S03008 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1967-102	1967 Oct 24 2249:09	1967-102A	Kosmos-184	Meteor No. 8	S03010 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1967-103	1967 Oct 25 1915	1967-103A	OPS 4995	KH8-9 GAMBIT	S03012 NRO/USAF	Titan IIIB	3B-11	V	SLC4W	LR671026
			SRV-1	A00941 NRO/USAF	A00941 NRO/USAF					
			SRV-2	SRV-2	A00943 NRO/USAF					
			SRV-2	I2-EM	S03013 PKO	Tsiklon-2A	-	NIIP-5	LC90/19	RAEX
1967-104	1967 Oct 27 0221?	1967-104A	Kosmos-185	Soyuz No. 6	S03014 MOM	Soyuz 11A511	-	NIIP-5	-	Petrov71
1967-105	1967 Oct 27 0929:59	1967-105A	Kosmos-186	OGCh	S03016 RVSN	R-360 8K69	Ya22500 No. 13L	NIIP-5	LC162/36	Kosmodrom9904
1967-106	1967 Oct 28 1315	1967-106A	Kosmos-187	Soyuz No. 5	S03020 MOM	Soyuz 11A511	-	NIIP-5	-	RAEX
1967-107	1967 Oct 30 0812?	1967-107A	Kosmos-188	Tselina-O GVM	S03021 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1967-108	1967 Oct 30 1759?	1967-108A	Kosmos-189	OPS 0562	S03024 NRO/CIA	Thorad SLV-2G Agena D	513	V	SLC1E	PER
1967-109	1967 Nov 2 2131:19	1967-109A	OPS 0562	SRV 1044-1	A00957 NRO/CIA					
			SRV 734	SRV 1044-2	A00962 NRO/CIA					
			SRV 734	EHH B9	S03025 USAF/NSA					
			SRV-2	Zenit-4	S03026 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1967-110	1967 Nov 3 1120?	1967-110A	Kosmos-190	ATS 3	S03029 NASA GSFC	SLV-3 Agena D	5103 (AA25)	CC	LC12	TR-1022
1967-111	1967 Nov 5 2337:00	1967-111A	ATS 3	Surveyor 6	S03031 NASA/JPL	SLV-3C Centaur	AC-14	CC	LC36B	TR-1022
1967-112	1967 Nov 7 0739:01	1967-112A	Surveyor 6	Saturn S-IVB-501	S03033 NASA MSFC	Saturn V	SA-501	LUT1,KSC	LC39A	KHR-1
1967-113	1967 Nov 9 1200:01	1967-113B	Saturn S-IVB-501	Apollo 4	S03032 NASA MSC					
			Apollo 4	LTA-10R	A00955 NASA MSC					
			1967-113A	ESSA 6	S03035 ESSA	Thor Delta E1	480/D54	V	SLC2E	TR-1022
1967-114	1967 Nov 10 1753:08	1967-114A	ESSA 6	DS-Pl-Yu No. 9	S03043 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1967-115	1967 Nov 21 1429:48	1967-115A	Kosmos-191	[Zond-4]	F00441 MOM	Proton-K/D	230-01	NIIP-5	LC81/24	NK9810-25
1967-F12	1967 Nov 22 1907:59	1967-F12	[Zond-4]	Tsiklon	S03047 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1967-116	1967 Nov 23 1500?	1967-116A	Kosmos-192	Zenit-2 No. 58	S03052 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1967-117	1967 Nov 25 1130	1967-117A	Kosmos-193	WRESAT	S03054 WRE	SPARTA	2029/SV-10	WOO	LA8	Henderson
1967-118	1967 Nov 29 0449	1967-118A	WRESAT	Zenit-4	S03055 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1967-119	1967 Dec 3 1200?	1967-119A	Kosmos-194	OV3-6	S03057 USAF OAR	Scout B	S158C	V	SLC5	LAAFB
1967-120	1967 Dec 5 0103:46	1967-120A	OV3-6	KH8-10 GAMBIT	S03058 NRO/USAF	Titan IIIB	3B-12	V	SLC4W	TLE
1967-121	1967 Dec 5 1845?	1967-121A	OPS 5000	SRV-1	A00969 NRO/USAF					
			SRV-1	SRV-2	A00971 NRO/USAF					
			SRV-2	OPS 1001	S03063 NRO/CIA	Thorad SLV-2G Agena D	514	V	SLC1W	PER
1967-122	1967 Dec 9 2226	1967-122A	OPS 1001	SRV 805	A00976 NRO/CIA					
			SRV 806	SRV 1102-1	A00978 NRO/CIA					
			SRV 806	SRV 1102-2	S03067 NASA GSFC	Thor Delta E1	489/D55	CC	LC17B	TR-1022
1967-123	1967 Dec 13 1408:00	1967-123B	TTS 1	TTS A	S03066 NASA ARC					
			Pioneer 8	Zenit-2 No. 57	S03071 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1967-124	1967 Dec 16 1200:37	1967-124A	Pioneer 8	DS-U1-G No. 2	S03074 MO SSSR	Kosmos 63S1	-	GTsP-4	LC86/1	AVMDS
1967-125	1967 Dec 19 0630:07	1967-125A	Kosmos-195	DS-U2-V No. 3	S03079 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/4	AVMDS
1967-126	1967 Dec 26 0901:59	1967-126A	Kosmos-196	US-A	S03082 MO SSSR	Tsiklon-2A	-	NIIP-5	LC90/19	RAEX
1967-127	1967 Dec 27 1128?	1967-127B	Kosmos-198	Surveyor 7	S03091 NASA/JPL	SLV-3C Centaur	AC-15	CC	LC36A	TR-1022
1968-001	1968 Jan 7 0630:00	1968-001A	Surveyor 7	Geos 2 (Explorer 36)	S03093 NASA GSFC	Thor Delta E1	454/D56	V	SLC2E	TR-1022
1968-002	1968 Jan 11 1616:00	1968-002A	Geos 2 (Explorer 36)	Zenit-2 No. 59	S03115 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1968-003	1968 Jan 16 1200:01	1968-003C	Kosmos-199	Ferret 12	S03097 USAF/NSA	Thor SLV-2A Agena D	498	V	SLC2W	LR680117
1968-004	1968 Jan 17 1012	1968-004A	OPS 1965	KH8-11 GAMBIT	S03098 NRO/USAF	Titan IIIB	3B-13	V	SLC4W	LR680118
1968-005	1968 Jan 18 1904	1968-005A	OPS 5028	SRV-1	A00986 NRO/USAF					
			1968-005	SRV-2	A00988 NRO/USAF					
			1968-005	Tselina-O	S03100 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1968-006	1968 Jan 19 2159?	1968-006A	Kosmos-200	Saturn S-IVB-204	S03108 NASA MSFC	Saturn IB	SA-204	CC	LC37B	SP-4205
1968-007	1968 Jan 22 2248:08	1968-007C	Saturn S-IVB-204	LM 1 Ascent Stage	S03106 NASA MSC					
			LM 1 Descent Stage	Apollo 5	S03107 NASA MSC					
			1968-007B	Apollo 5 DS	S03113 NRO/CIA	Thorad SLV-2G Agena D	516	V	SLC1E	PER
1968-008	1968 Jan 24 2226	1968-008A	OPS 2243	CORONA 1045	A00993 NRO/CIA					
			1968-008	SRV 1045-1	A00995 NRO/CIA					
			1968-008	SRV 742	S03114 USAF/NSA					
			1968-008B	OPS 6236	S03118 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1968-009	1968 Feb 6 0800?	1968-009A	OPS 6236	Zenit-4	F00445 MOM	Molniya 8K78M	Ya716-57	NIIP-5	LC1	NK9701-29
1968-F01	1968 Feb 7 1043:54	1968-F01	[Luna]	E-6LS No. 112	S03128 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/4	AVMDS
1968-010	1968 Feb 20 1003:11	1968-010A	Kosmos-202	DS-U2-V No. 4	S03129 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1968-011	1968 Feb 20 1600?	1968-011A	Kosmos-203	Sfera	S03133 USN	Scout A	S162C	V	SLC5	LAAFB
1968-012	1968 Mar 2 0355:01	1968-012A	NNS O-18	NNS O-18	S03134 MOM	Proton-K/D	231-01	NIIP-5	LC81/23	NK9810-25
1968-013	1968 Mar 2 1829:23	1968-013A	Zond-4	L-1 No. 6L	S03138 NASA GSFC	SLV-3A Agena D	5602A (AA26)	CC	LC13	TR-1022
1968-014	1968 Mar 4 1306:01	1968-014A	OGO 5	OGO E	S03139 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	TLE
1968-015	1968 Mar 5 1120?	1968-015A	Kosmos-204	DS-Pl-I No. 3	S03140 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1968-016	1968 Mar 5 1230:01	1968-016A	Kosmos-205	Zenit-2 No. 56	S03141 NRL	Scout B	S160C	WI	LA3A	LAAFB
1968-017	1968 Mar 5 1828:00	1968-017A	SR 9	Solar Explorer B	F00450 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/4	AVMDS
1968-F02	1968 Mar 6 1102:57	1968-F02	Kosmos	DS-U1-Ya No. 1	S03148 NRO/USAF	Titan IIIB	3B-14	V	SLC4W	RAE
1968-018	1968 Mar 13 1955?	1968-018A	OPS 5057	KH8-12 GAMBIT	A01002 NRO/USAF					
			1968-018	SRV-1	A01004 NRO/USAF					
			1968-018	SRV-2	S03150 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1968-019	1968 Mar 14 0934:01	1968-019A	Kosmos-206	Meteor No. 9	S03152 NRO/CIA	Thorad SLV-2G Agena D	518	V	SLC1E	PER
1968-020	1968 Mar 14 2200:14	1968-020A	OPS 4849	CORONA 1046	A01008 NRO/CIA					
			1968-020	SRV 747	A01012 NRO/CIA					
			1968-020	SRV 748	S03153 USAF/NSA					
			1968-020B	OPS 7076	S03154 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1968-021	1968 Mar 16 1230?	1968-021A	Kosmos-207	Zenit-4	S03156 MOM	Voskhod 11A57	-	NIIP-5	LC1	RAE
1968-022	1968 Mar 21 0950?	1968-022A	Kosmos-208	Zenit-2M	S03167 MOM					
			1968-022C	Nauka						

1968-023	1968 Mar 22 0930?	1968-023C	Kosmos-209	US-A	S03162 MO SSSR	Tsiklon-2A	-	NIIP-5	LC90/19	RAEX
1968-024	1968 Apr 3 1100	1968-024A	Kosmos-210	Zenit-2 No. 60	S03168 MOM	Vokhod 11A57	-	NIIP-53	-	NK96-10-65
1968-025	1968 Apr 4 1200:01	1968-025B	Saturn S-IVB-502	Saturn S-IVB-502	S03171 NASA MSFC	Saturn V	SA-502	LUT2,KSC	LC39A	KHR-1
		1968-025A	Apollo 6	Apollo CM-020	S03170 NASA MSC					
		1968-025E	LTA-2R	LTA-2R	S03187 NASA MSC					
1968-026	1968 Apr 6 0959:42	1968-026A	OVI-13	OVI-13	S03173 USAF OAR	Atlas F	107F	V	ABRESA2	VCR
		1968-026B	OVI-14	OVI-14	S03174 USAF OAR					
		1968-027A	Luna-14	E-6LS No. 113	S03178 MOM	Molniya 8K78M	Ya716-58	NIIP-5	LC1	Petrov71
1968-027	1968 Apr 7 1009:32	1968-027A	Kosmos-211	DS-Pl-Yu No. 13	S03181 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-028	1968 Apr 9 1126:25	1968-028A	Kosmos-212	Soyuz No. 8	S03183 MOM	Soyuz 11A511	-	NIIP-5	-	Petrov71
1968-029	1968 Apr 14 1000:00	1968-029A	Kosmos-213	Soyuz No. 7	S03193 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1968-030	1968 Apr 15 0934:18	1968-030A	OPS 5105	KH8-13 GAMBIT	S03199 NRO/USAF	Titan IIIB	3B-15	V	SLC4W	LR680417
1968-031	1968 Apr 17 1700	1968-031A	SRV-1	SRV-1	A01025 NRO/USAF					
		1968-031	SRV-2	SRV-2	A01027 NRO/USAF					
		1968-032A	Kosmos-214	Zenit-4	S03203 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1968-032	1968 Apr 18 1030?	1968-032A	Kosmos-215	DS-U1-A No. 1	S03205 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1968-033	1968 Apr 18 2229:53	1968-033A	Kosmos-216	Zenit-2 No. 62	S03207 MOM	Vokhod 11A57	-	NIIP-5	-	NK96-10-65
1968-034	1968 Apr 20 1030:00	1968-034A	Molniya-1	Molniya-1	S03209 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1968-035	1968 Apr 21 0420?	1968-035A	[Zond-5]	L-1 No. 7L	F00455 MOM	Proton-K/D	232-01	NIIP-5	LC81/24	NK9810-25
1968-F03	1968 Apr 22 2301:57	1968-F03	Kosmos-217	I2M	S03216 PKO	Tsiklon-2A	-	NIIP-5	LC90/20	RAEX
1968-036	1968 Apr 24 1600?	1968-036A	Kosmos-218	OGCh	S03217 RVSN	R-360 8K69	Ya22500 No. 17L	NIIP-5	LC162/36	RAE
1968-037	1968 Apr 25 0043?	1968-037A	Kosmos-219	DS-U2-D No. 2	S03220 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1968-038	1968 Apr 26 0442:56	1968-038A	OPS 1419	CORONA 1103	S03232 NRO/CIA	Thorad SLV-2G Agena D	511	V	SLC3W	PER
1968-039	1968 May 1 2131	1968-039B	SRV 807	SRV 1103-1	A01039 NRO/CIA					
		1968-039	SRV 808	SRV 1103-2	A01041 NRO/CIA					
		1968-040A	Kosmos-220	Tsiklon	S03229 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1968-040	1968 May 7 1358?	1968-040A	ESRO 2B	ESRO 2B	S03233 ESRO ESTEC	Scout B	S161C	V	SLC5	VCR
1968-041	1968 May 17 0206:00	1968-041A	Nimbus B	Nimbus B	F00457 NASA GSFC	Thorad SLV-2G Agena D	520 (TA9)	V	SLC2E	JG9602
1968-F04	1968 May 18 0823	1968-F04	EGRS 10	Secor 10	F00458 USA ACE					
		1968-U01	OGCh	OGCh	A01045 RVSN	R-360 8K69	Ya22500 No. 18L	NIIP-5	LC162/36	Kosmodrom9904
1968-042	1968 May 23 0438:12	1968-042A	OPS 7869	DAPP 4B F-1 (FTV-8)	S03266 USAF	R Burner 2	277	V	SLC10W	SACT383
1968-043	1968 May 24 0704:50	1968-043A	Kosmos-221	DS-Pl-Yu No. 14	S03269 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1968-U02	1968 May 28	1968-U02	OGCh	OGCh	A01049 RVSN	R-360 8K69	Ya22501m No. 19	NIIP-5	LC161/35	Kosmodrom9904
1968-044	1968 May 30 2029:49	1968-044A	Kosmos-222	DS-Pl-Yu No. 12	S03272 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-045	1968 Jun 1 1050	1968-045A	Kosmos-223	Zenit-2 No. 63	S03274 MOM	Vokhod 11A57	-	NIIP-53	-	NK96-10-65
1968-046	1968 Jun 4 0645?	1968-046A	Kosmos-224	Zenit-4	S03276 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1968-F05	1968 Jun 4	1968-F05	Kosmos	Sfera 12L	F00460 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/2	AVMNLJ
1968-047	1968 Jun 5 1731?	1968-047A	OPS 5138	KH8-14 GAMBIT	S03278 NRO/USAF	Titan IIIB	3B-16	V	SLC4W	RAE
		1968-047	SRV-1	SRV-1	A01052 NRO/USAF					
		1968-047	SRV-2	SRV-2	A01054 NRO/USAF					
		1968-048A	Kosmos-225	DS-U1-Ya No. 2	S03279 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1968-048	1968 Jun 11 2129:54	1968-048A	Kosmos-226	Meteor No. 10	S03282 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1968-049	1968 Jun 12 1314:59	1968-049A	OPS 9341	IDCSP 20	S03284 USAF	Titan IIIC	3C-16	CC	LC41	PH960801
1968-050	1968 Jun 13 1403:50	1968-050A	OPS 9342	IDCSP 21	S03285 USAF					
		1968-050B	OPS 9343	IDCSP 22	S03286 USAF					
		1968-050C	OPS 9344	IDCSP 23	S03287 USAF					
		1968-050D	OPS 9345	IDCSP 24	S03288 USAF					
		1968-050E	OPS 9346	IDCSP 25	S03289 USAF					
		1968-050F	OPS 9347	IDCSP 26	S03290 USAF					
		1968-050G	OPS 9348	IDCSP 27	S03291 USAF					
1968-F06	1968 Jun 15	1968-F06	Kosmos	Strela-2	F00462 MO SSSR	Kosmos 11K65	-	NIIP-5	LC41/15	AVMNLJ
1968-051	1968 Jun 18 0615?	1968-051A	Kosmos-227	Zenit-4	S03294 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1968-052	1968 Jun 20 2146:05	1968-052A	OPS 5343	CORONA 1047	S03296 NRO/CIA	Thorad SLV-2G Agena D	517	V	SLC1E	PH
		1968-052	SRV 745	SRV 1047-1	A01061 NRO/CIA					
		1968-052	SRV 746	SRV 1047-2	A01066 NRO/CIA					
		1968-052B	OPS 5259	EHH B12	S03297 USAF/NSA					
1968-053	1968 Jun 21 1200?	1968-053A	Kosmos-228	Zenit-2M	S03298 MOM	Vokhod 11A57	-	NIIP-5	LC1	RAEX
		1968-053G	Nauka	Nauka	S03306 MOM					
1968-054	1968 Jun 26 1100?	1968-054A	Kosmos-229	Zenit-4	S03304 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1968-055	1968 Jul 4 1726:50	1968-055A	RAE 1	RAE A	S03307 NASA GSFC	Thor Delta J	476/D57	V	SLC2E	MOR S-877-68-
		1968-056A	Kosmos-230	DS-U3-S No. 2	S03308 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1968-056	1968 Jul 5 0659:50	1968-056A	Molniya-1 (9)	Molniya-1	S03310 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1968-057	1968 Jul 5 1525?	1968-057A	Kosmos-231	Zenit-2 No. 64	S03316 MOM	Vokhod 11A57	-	NIIP-5	-	NK96-10-65
1968-058	1968 Jul 10 1949:58	1968-058A	OVI-15	OVI-15S	S03318 USAF OAR	Atlas F	75F	V	ABRESA2	JCM
1968-059	1968 Jul 11 1930	1968-059B	LOADS	Cannonball	S03319 USAF OAR					
		1968-060A	Kosmos-232	Zenit-4	S03322 MOM	Proton-K/D	-	NIIP-5	LC81	-
1968-060	1968 Jul 16 1310?	1968-060A	Kosmos-233	DS-Pl-Yu No. 15	S03326 MO SSSR	Vokhod 11A57	-	NIIP-53	-	RAEX
1968-061	1968 Jul 18 1959:50	1968-061A	Kosmos-234	Zenit-4	S03332 MOM	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-062	1968 Jul 30 0700?	1968-062A	OPS 2222	CANYON 1	S03334 USAF/NSA	Vokhod 11A57	-	NIIP-5	-	RAEX
1968-063	1968 Aug 6 1116?	1968-063A	OPS 5187	KH8-15 GAMBIT	S03335 NRO/USAF	SLV-3A Agena D	5501A	CC	LC13	RAE
1968-064	1968 Aug 6 1633?	1968-064A	SRV-1	SRV-1	A01074 NRO/USAF	Titan IIIB	3B-17	V	SLC4W	RAE
		1968-064	SRV-2	SRV-2	A01076 NRO/USAF					
		1968-065A	OPS 5955	CORONA 1104	S03336 NRO/CIA	Thorad SLV-2G Agena D	522	V	SLC3W	LR680808
1968-065	1968 Aug 7 2136	1968-065A	SRV 809	SRV 1104-1	A01081 NRO/CIA					
		1968-065	SRV 810	SRV 1104-2	A01084 NRO/CIA					
		1968-066A	Explorer 39	AD-C	S03337 NASA LaRC	Scout B	S165C	V	SLC5	VCR
		1968-066B	Injun 5 (Explorer 40)	Injun E	S03338 NASA LaRC					
1968-067	1968 Aug 9 0700:00	1968-067A	Kosmos-235	Zenit-2 No. 61	S03339 MOM	Vokhod 11A57	-	NIIP-5	-	NK96-10-65
1968-068	1968 Aug 10 2233:02	1968-068A	ATS 4	ATS D	S03344 NASA GSFC	SLV-3C Centaur	AC-17	CC	LC36A	TR-1022
1968-069	1968 Aug 16 1124:33	1968-069A	ESSA 7	TOS E	S03345 ESSA	Thor Delta N	528/D58	V	SLC2E	TR-1022



1968-F07	1968 Aug 16 2057:44	1968-F07	UVR	UVR	F00464 USAF	Atlas Burner 2	7004	V	SLC3E	VCR
		1968-F07	EGRS 11	EGRS 11	F00466 USA ACE					
		1968-F07	EGRS 12	EGRS 12	F00467 USA ACE					
		1968-F07	OV5-8	OV5-8	F00468 USAF					
		1968-F07	Radcat	Radcat	F00469 USA					
		1968-F07	LCS 3	LCS 3	F00470 USA					
		1968-F07	Orbiscal 1	Orbiscal 1	F00471 USAF					
		1968-F07	LIDOS	LIDOS	F00473 USN					
		1968-F07	RM-18	RM-18	F00474 USAF					
		1968-F07	AVL-802 Mylar Sphere	AVL-802	F00476 USAF					
		1968-F07	AVL-802 Grid Sphere 7-1	AVL-802	F00477 USAF					
		1968-F07	AVL-802 Grid Sphere 7-2	AVL-802	F00478 USAF					
		1968-F07	AVL-802 Rigid Sphere	AVL-802	F00479 USAF					
1968-070	1968 Aug 27 1129?	1968-070A	Kosmos-236	Strela-2	S03347 MO SSSR	Kosmos 11K65	-	NIIP-5	LC41/15	RAEX
1968-071	1968 Aug 27 1229?	1968-071A	Kosmos-237	Zenit-4	S03348 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1968-072	1968 Aug 28 1000?	1968-072A	Kosmos-238	Soyuz No. 9	S03351 MOM	Soyuz 11A511	-	NIIP-5	-	RAEX
1968-073	1968 Sep 5 0700?	1968-073A	Kosmos-239	Zenit-4	S03353 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1968-074	1968 Sep 10 1830	1968-074A	OPS 5247	KH8-16 GAMBIT	S03375 NRO/USAF	Titan IIIB	3B-18	V	SLC4W	LR680910
		1968-074	SRV-1	SRV-1	A01091 NRO/USAF					
		1968-074	SRV-2	SRV-2	A01093 NRO/USAF					
1968-075	1968 Sep 14 0650:00	1968-075A	Kosmos-240	Zenit-2 No. 66	S03388 MOM	Voskhod 11A57	-	NIIP-5	-	NK96-10-65
1968-076	1968 Sep 14 2142:11	1968-076A	Zond-5	L-1 No. 9L	S03394 MOM	Proton-K/D	234-01	NIIP-5	LC81/23	NK9810-25
1968-077	1968 Sep 16 1230?	1968-077A	Kosmos-241	Zenit-4	S03398 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1968-078	1968 Sep 18 2132	1968-078A	OPS 0165	CORONA 1048	S03408 NRO/CIA	Thorad SLV-2G Agena D	524	V	SLC1E	PER
		1968-078	SRV 749	SRV 1048-1	A01102 NRO/CIA					
		1968-078	SRV 750	SRV 1048-2	A01105 NRO/CIA					
		1968-078B	OPS 8595	EHH B13	S03409 USAF/NSA					
1968-F08	1968 Sep 19 0009:00	1968-F08	Intelsat III F-1	Intelsat III F-1	F00487 INTELSAT	Thor Delta M	529/D59	CC	LC17A	TR-1022
1968-079	1968 Sep 20 1439:59	1968-079A	Kosmos-242	DS-P1-I No. 4	S03414 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-080	1968 Sep 23 0739?	1968-080A	Kosmos-243	Zenit-2M	S03418 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
		1968-080C	Nauka	Nauka	S03452 MOM					
1968-081	1968 Sep 26 0737:01	1968-081A	OV2-5	OV2-5	S03428 USAF	Titan IIIC	3C-5	CC	LC41	PH960801
		1968-081D	LES 6	LES 6	S03431 USAF					
		1968-081B	ERS 28	ERS 28	S03429 USAF					
		1968-081C	ERS 21	ERS 21	S03430 USAF					
1968-082	1968 Oct 2 1335	1968-082A	Kosmos-244	OGCh	S03449 RVSN	R-360 8K69	V22501 No. 10T	NIIP-5	LC161/35	Kosmodrom9904
1968-083	1968 Oct 3 1258:59	1968-083A	Kosmos-245	DS-P1-Yu No. 16	S03457 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-084	1968 Oct 3 2049:39	1968-084A	Aurora	ESRO 1A	S03459 ESRO	Scout B	S167C	V	SLC5	VCR
1968-085	1968 Oct 5 0032?	1968-085A	Molniya-1	Molniya-1	S03469 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1968-086	1968 Oct 5 1116?	1968-086A	OPS 0964	Ferret 13	S03472 USAF/NSA	Thorad SLV-2G Agena D	521	V	SLC1W	RAE
1968-087	1968 Oct 7 1205?	1968-087A	Kosmos-246	Zenit-4	S03473 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1968-088	1968 Oct 11 1205:01	1968-088A	Kosmos-247	Zenit-2 No. 65	S03484 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1968-089	1968 Oct 11 1502:45	1968-089B	Saturn S-IVB-205	Saturn S-IVB-205	S03487 NASA MSFC	Saturn IB	SA-205	CC	LC34	SP-4205
		1968-089A	Apollo CM-101	Apollo CM-101	S03486 NASA MSC					
		1968-089	Apollo 7 SM	Apollo SM-101	A01109 NASA MSC					
1968-090	1968 Oct 19 0420?	1968-090A	Kosmos-248	I2M	S03503 PKO	Tsiklon-2A	-	NIIP-5	LC90/19	RAEX
1968-091	1968 Oct 20 0402?	1968-091A	Kosmos-249	I2P	S03504 PKO	Tsiklon-2A	-	NIIP-5	LC90/20	RAEX
1968-092	1968 Oct 23 0434:03	1968-092A	OPS 4078	DAPP 6422 (FTV-7)	S03510 USAF	Thor Burner 2	173	V	SLC10W	SAC7383
1968-093	1968 Oct 25 0900:00	1968-093A	Soyuz-2	Soyuz No. 11	S03511 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1968-094	1968 Oct 26 0834:18	1968-094A	Soyuz-3	Soyuz No. 10	S03516 MOM	Soyuz 11A511	-	NIIP-5	LC31	Petrov71
1968-095	1968 Oct 30 2200?	1968-095A	Kosmos-250	Tselina-O	S03526 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1968-096	1968 Oct 31 0914?	1968-096	Kosmos-251	Zenit-4M	A01123 MOM	Voskhod 11A57	-	NIIP-5	LC1	RAEX
1968-097	1968 Nov 1 0027?	1968-097A	Kosmos-252	I2P	S03530 PKO	Tsiklon-2A	-	NIIP-5	LC90/20	RAEX
1968-098	1968 Nov 3 2130	1968-098A	OPS 1315	CORONA 1105	S03531 NRO/CIA	Thorad SLV-2G Agena D	515	V	SLC3W	LR681104
		1968-098	SRV 810	SRV 1105-1	A01136 NRO/CIA					
		1968-098	SRV 811	SRV 1105-2	A01140 NRO/CIA					
1968-099	1968 Nov 6 1910	1968-099A	OPS 5296	KH8-17 GAMBIT	S03532 NRO/USAF	Titan IIIB	3B-19	V	SLC4W	LR681107
		1968-099	SRV-1	SRV-1	A01129 NRO/USAF					
		1968-099	SRV-2	SRV-2	A01131 NRO/USAF					
1968-100	1968 Nov 8 0946:29	1968-100B	TETR 2	TETR B	S03534 NASA GSFC	Thor Delta E1	479/D60	CC	LC17B	TR-1022
		1968-100A	Pioneer 9	Pioneer D	S03533 NASA ARC					
1968-101	1968 Nov 10 1911:31	1968-101A	Zond-6	L-1 No. 12L	S03535 MOM	Proton-K/D	235-01	NIIP-5	LC81/23	NK9810-25
1968-102	1968 Nov 13 1200:01	1968-102A	Kosmos-253	Zenit-2 No. 67	S03542 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1968-103	1968 Nov 16 1140	1968-103A	Proton-4	N-6 No. 1	S03544 MOM	Proton-K	236-01	NIIP-5	LC81/24	NK9810-25
1968-104	1968 Nov 21 1210?	1968-104A	Kosmos-254	Zenit-4	S03562 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1968-105	1968 Nov 29 1240:34	1968-105A	Kosmos-255	Zenit-2 No. 68	S03574 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1968-F09	1968 Nov 29 2312:02	1968-F09	STV 1	STV 1	F00491 ELDO	Europa I	F-7	WOO	LA6A	Henderson
1968-106	1968 Nov 30 1200?	1968-106A	Kosmos-256	Sfera	S03576 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1968-107	1968 Dec 3 1452:21	1968-107A	Kosmos-257	DS-P1-Yu No. 17	S03578 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-108	1968 Dec 4 1923	1968-108A	OPS 6518	KH8-18 GAMBIT	S03594 NRO/USAF	Titan IIIB	3B-20	V	SLC4W	LR681205
		1968-108	SRV-1	SRV-1	A01145 NRO/USAF					
		1968-108	SRV-2	SRV-2	A01147 NRO/USAF					
1968-109	1968 Dec 5 1855:00	1968-109A	HEOS 1	HEOS A1	S03595 ESRO	Thor Delta E1	481/D61	CC	LC17B	TR-1022
1968-110	1968 Dec 7 0840:09	1968-110A	OA0 2	OA0 A2	S03597 NASA GSFC	SLV-3C Centaur	AC-16	CC	LC36B	TR-1022
1968-111	1968 Dec 10 0825:01	1968-111A	Kosmos-258	Zenit-2 No. 69	S03602 MOM	Voskhod 11A57	-	NIIP-5	-	NK96-10-65
1968-112	1968 Dec 12 2222	1968-112A	OPS 4740	CORONA 1049	S03604 NRO/CIA	Thorad SLV-2G Agena D	527	V	SLC3W	LR681213
		1968-112	SRV 751	SRV 1049-1	A01154 NRO/CIA					
		1968-112	SRV 752	SRV 1049-2	A01161 NRO/CIA					
		1968-112B	OPS 7684	EHH C1	S03605 USAF/NSA					
1968-113	1968 Dec 14 0509:54	1968-113A	Kosmos-259	DS-U2-I No. 3	S03612 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1968-114	1968 Dec 15 1721:04	1968-114A	ESSA 8	TOS F	S03615 ESSA	Thor Delta N	532/D62	V	SLC2E	TR-1022
1968-115	1968 Dec 16 0915?	1968-115A	Kosmos-260	Molniya-1Yu?	S03619 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX

1968-116	1968 Dec 19 0032:00	1968-116A	Intelsat III F-2	Intelsat III F-2	S03623 INTELSAT	Thor Delta M	536/D63	CC	LC17A	TR-1022
1968-117	1968 Dec 19 2355	1968-117A	Kosmos-261	DS-U2-GK No. 1	S03624 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1968-118	1968 Dec 21 1251:00	1968-118B	Saturn S-IVB-503N	Saturn S-IVB-503N	S03627 NASA MSFC	Saturn V	SA-503	LUT1, KSC	LC39A	JCM
		1968-118A	Apollo 8	Apollo CM-103	S03626 NASA MSC					
		1968-118	LTA-B	LTA-B	A01159 NASA MSC					
1968-119	1968 Dec 26 0945:02	1968-119A	Kosmos-262	DS-U2-GF No. 1	S03629 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1969-001	1969 Jan 5 0628:08	1969-001	SA	SA	A01219 MOM	Molniya 8K78M	-	NIIP-5	-	Petrov71
		1969-001A	Venera-5	4V-1 No. 330	S03642 MOM					
		1969-002	SA	SA	A01220 MOM	Molniya 8K78M	-	NIIP-5	-	Petrov71
		1969-002A	Venera-6	4V-1 No. 331	S03648 MOM					
1969-003	1969 Jan 12 1210:00	1969-003A	Kosmos-263	Zenit-2 No. 70	S03651 MOM	Vokhodo 11A57	-	NIIP-53	-	NK96-10-65
1969-004	1969 Jan 14 0730:00	1969-004A	Soyuz-4	Soyuz No. 12	S03654 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1969-005	1969 Jan 15 0704:57	1969-005A	Soyuz-5	Soyuz No. 13	S03656 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1969-F01	1969 Jan 20 0414:36	1969-F01	[Zond-7]	L-1 No. 13L	F00496 MOM	Proton-K/D	237-01	NIIP-5	LC81/23	NK9810-25
1969-006	1969 Jan 22 1648:00	1969-006A	OSO 5	OSO F	S03663 NASA GSFC	Thor Delta C1	487/D64	CC	LC17B	TR-1022
1969-007	1969 Jan 22 1910	1969-007A	OPS 7585	KH8-19 GAMBIT	S03665 NRO/USAF	Titan IIIB	3B-6	V	SLC4W	LR690122
		1969-007	SRV-1	SRV-1	A01173 NRO/USAF					
		1969-007	SRV-2	SRV-2	A01175 NRO/USAF					
1969-008	1969 Jan 23 0915?	1969-008A	Kosmos-264	Zenit-4M	S03667 MOM	Vokhodo 11A57	-	NIIP-5	LC1	RAEX
1969-F02	1969 Jan 25	1969-F02	[Kosmos]	US-A	F00498 MO SSSR	Tsiklon-2A	-	NIIP-5	LC90/19	AVMNLJ
1969-009	1969 Jan 30 0646	1969-009A	Isis 1	Isis A	S03669 CRC	Thor Delta E1	485/D65	V	SLC2E	TR-1022
1969-F03	1969 Feb 1 1211	1969-F03	[Meteor]	Meteor No. 11	F00502 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1969-010	1969 Feb 5 2159:54	1969-010A	OPS 3890	CORONA 1106	S03672 NRO/CIA	Thorad SLV-2G Agena D	519	V	SLC3W	PER
		1969-010	SRV 801R	SRV 1106-1	A01182 NRO/CIA					
		1969-010	SRV 802R	SRV 1106-2	A01184 NRO/CIA					
		1969-010B	OPS 2644	EHH C2	S03673 USAF/NSA					
1969-011	1969 Feb 6 0039:00	1969-011A	Intelsat III F-3	Intelsat III F-3	S03674 INTELSAT	Thor Delta M	530/D66	CC	LC17A	TR-1022
1969-012	1969 Feb 7 1359	1969-012A	Kosmos-265	DS-P1-Yu No. 21	S03675 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-013	1969 Feb 9 2109:00	1969-013A	OPS 0757	Tacsat	S03691 USAF	Titan IIIC	3C-17	CC	LC41	PH960801
1969-F04	1969 Feb 19 0648:15	1969-F04	[Lunokhod]	8EL No. 201	F00509 MOM	Proton-K/D	239-01	NIIP-5	LC81/24	NK9524-70
		1969-F04	[Luna-15]	E-8 No. 201	F00508 MOM					
1969-F05	1969 Feb 21 0918:07	1969-F05	L-1S No. 3 11F92	L-1S No. 3 11F92	F00514 MOM	N-1 11A52	3L	NIIP-5	LC110R	JCM
1969-014	1969 Feb 25 0129:02	1969-014A	Mariner 6	Mariner 69-3	S03759 NASA/JPL	SLV-3C Centaur	AC-20	CC	LC36B	TR-1022
1969-015	1969 Feb 25 1020:01	1969-015A	Kosmos-266	Zenit-2 No. 71	S03761 MOM	Vokhodo 11A57	-	NIIP-53	-	NK96-10-65
1969-016	1969 Feb 26 0747:01	1969-016A	ESSA 9	TOS G	S03764 ESSA	Thor Delta E1	483/D67	CC	LC17B	TR-1022
1969-017	1969 Feb 26 0830?	1969-017A	Kosmos-267	Zenit-4	S03765 MOM	Vokhodo 11A57	-	NIIP-5	-	RAEX
1969-018	1969 Mar 3 1600:00	1969-018B	Saturn S-IVB-504N	Saturn S-IVB-504N	S03770 NASA MSFC	Saturn V	SA-504	LUT2, KSC	LC39A	KHR-1
		1969-018C	Spider	LM 3 AS	S03771 NASA MSC					
		1969-018A	Gumdrop	Apollo CM-104	S03769 NASA MSC					
1969-019	1969 Mar 4 1930	1969-019A	OPS 4248	KH8-20 GAMBIT	S03772 NRO/USAF	Titan IIIB	3B-7	V	SLC4W	LR690305
		1969-019	SRV-1	SRV-1	A01191 NRO/USAF					
		1969-019	SRV-2	SRV-2	A01193 NRO/USAF					
1969-020	1969 Mar 5 1304:55	1969-020A	Kosmos-268	DS-P1-Yu No. 18	S03773 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1969-021	1969 Mar 5 1725?	1969-021A	Kosmos-269	Tselina-O	S03775 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1969-022	1969 Mar 6 1215?	1969-022A	Kosmos-270	Zenit-4	S03777 MOM	Vokhodo 11A57	-	NIIP-53	-	RAEX
1969-023	1969 Mar 15 1215?	1969-023A	Kosmos-271	Zenit-4	S03807 MOM	Vokhodo 11A57	-	NIIP-53	-	RAEX
1969-024	1969 Mar 17 1640?	1969-024A	Kosmos-272	Sfera	S03818 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1969-025	1969 Mar 18 0740?	1969-025D	OVI-17A	Orbiscal 2	S03826 USAF OAR	Atlas F	104F	V	ABRESA2	RAE
		1969-025A	OVI-17	OVI-175	S03823 USAF OAR					
		1969-025B	OVI-18	OVI-185	S03824 USAF OAR					
		1969-025C	OVI-19	OVI-195	S03825 USAF OAR					
1969-026	1969 Mar 19 2138	1969-026A	OPS 3722	CORONA 1050	S03829 NRO/CIA	Thorad SLV-2G Agena D	541	V	SLC3W	LR690320
		1969-026	SRV 737	SRV 1050-1	A01203 NRO/CIA					
		1969-026	SRV 738	SRV 1050-2	A01206 NRO/CIA					
		1969-026B	OPS 2285	EHH B14	S03830 USAF/NSA					
1969-027	1969 Mar 22 1215:00	1969-027A	Kosmos-273	Zenit-2 No. 77	S03831 MOM	Vokhodo 11A57	-	NIIP-53	-	NK96-10-65
1969-028	1969 Mar 24 1010?	1969-028A	Kosmos-274	Zenit-4	S03833 MOM	Vokhodo 11A57	-	NIIP-5	-	RAEX
1969-029	1969 Mar 26 1230	1969-029A	Meteor	Meteor No. 12	S03835 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1969-F06	1969 Mar 27 1040:45	1969-F06	[Mars-2]	2M No. 521	F00522 MOM	Proton-K/D	240-01	NIIP-5	LC81/23	NK9810-25
1969-030	1969 Mar 27 2222:01	1969-030A	Mariner 7	Mariner 69-2	S03837 NASA/JPL	SLV-3C Centaur	AC-19	CC	LC36A	TR-1022
1969-031	1969 Mar 28 1600:08	1969-031A	Kosmos-275	DS-P1-I No. 5	S03846 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-F07	1969 Apr 2 1033:00	1969-F07	Mars DU	2M No. 522	F00528 MOM	Proton-K/D	233-01	NIIP-5	LC81/24	NK9810-25
1969-032	1969 Apr 4 1020?	1969-032A	Kosmos-276	Zenit-4	S03854 MOM	Vokhodo 11A57	-	NIIP-53	-	RAEX
1969-033	1969 Apr 4 1300:04	1969-033A	Kosmos-277	DS-P1-Yu No. 20	S03855 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-034	1969 Apr 9 1300:01	1969-034A	Kosmos-278	Zenit-2 No. 78	S03883 MOM	Vokhodo 11A57	-	NIIP-53	-	NK96-10-65
1969-035	1969 Apr 11 0230?	1969-035A	Molniya-1	Molniya 8K78M	S03885 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1969-036	1969 Apr 13 0224?	1969-036A	OPS 3148	CANYON 2	S03889 USAF	SLV-3A Agena D	5502A	CC	LC13	RAE
1969-037	1969 Apr 14 0754:03	1969-037A	Nimbus 3	Nimbus B2	S03890 NASA GSFC	Thorad SLV-2G Agena D	543 (TA10)	V	SLC2E	LR690414
		1969-037B	Secor 13	Secor 13	S03891 USA ACE					
1969-038	1969 Apr 15 0814?	1969-038A	Kosmos-279	Zenit-4	S03893 MOM	Vokhodo 11A57	-	NIIP-5	-	RAEX
1969-039	1969 Apr 15 1730	1969-039A	OPS 5310	KH8-21 GAMBIT	S03895 NRO/USAF	Titan IIIB	3B-21	V	SLC4W	LR690415
		1969-039	SRV-1	SRV-1	A01214 NRO/USAF					
		1969-039	SRV-2	SRV-2	A01216 NRO/USAF					
1969-040	1969 Apr 23 0955?	1969-040A	Kosmos-280	Zenit-4M	S03906 MOM	Vokhodo 11A57	-	NIIP-5	LC1	RAEX
1969-041	1969 May 2 0146:58	1969-041A	OPS 1101	CORONA 1051	S03914 NRO/CIA	Thorad SLV-2G Agena D	544	V	SLC3W	PER
		1969-041	SRV 739	SRV 1051-1	A01226 NRO/CIA					
		1969-041	SRV 740	SRV 1051-2	A01230 NRO/CIA					
		1969-041B	OPS 1721	EHH B15	S03915 USAF/NSA					
1969-042	1969 May 13 0915:01	1969-042A	Kosmos-281	Zenit-2 No. 72	S03939 MOM	Vokhodo 11A57	-	NIIP-53	-	NK96-10-65
1969-043	1969 May 18 1649:00	1969-043B	Saturn S-IVB-505N	Saturn S-IVB-505N	S03943 NASA MSFC	Saturn V	SA-505	LUT3, KSC	LC39B	KHR-1
		1969-043D	Snoopy	LM 4 AS	S03949 NASA MSC					
		1969-043A	Charlie Brown	Apollo CM-106	S03941 NASA MSC					

1969-044	1969 May 20 0840?	1969-044A	Kosmos-282	Zenit-4	S03944 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-045	1969 May 22 0200:00	1969-045A	Intelsat III F-4	Intelsat III F-4	S03947 INTELSAT	Thor Delta M	533/D68	CC	LC17A	TR-1022
1969-046	1969 May 23 0757:01	1969-046C	OV5-9	OV5-9	S03952 USAF	Titan IIIC	3C-15	CC	LC41	PH960801
		1969-046A	ERS 29	ERS 29	S03950 USAF					
		1969-046B	ERS 26	ERS 26	S03951 USAF					
		1969-046D	Vela 5A	Vela 5A	S03954 USAF					
		1969-046E	Vela 5B	Vela 5B	S03955 USAF					
1969-047	1969 May 27 1259:59	1969-047A	Kosmos-283	DS-P1-Yu No. 19	S03957 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-048	1969 May 29 0659?	1969-048A	Kosmos-284	Zenit-4	S03971 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1969-049	1969 Jun 3 1257:27	1969-049A	Kosmos-285	DS-P1-Yu No. 24	S03983 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-050	1969 Jun 3 1649	1969-050A	OPS 1077	KH8-22 GAMBIT	S03984 NRO/USAF	Titan IIIB	3B-22	V	SLC4W	LR690603
		1969-050	SRV-1	SRV-1	A01238 NRO/USAF					
		1969-050	SRV-2	SRV-2	A01240 NRO/USAF					
1969-051	1969 Jun 5 1442:45	1969-051A	OGO 6	OGO F	S03986 NASA GSFC	Thorad SLV-2H Agena D	526 (TA11)	V	SLC2E	KHR-1
1969-F08	1969 Jun 14 0400:47	1969-F08	[Luna-15]	E-8-5 No. 402	F00534 MOM	Proton-K/D	238-01	NIIP-5	LC81/24	NK9810-25
		1969-F08	[VA]	VA	F00536 MOM					
1969-052	1969 Jun 15 0859?	1969-052A	Kosmos-286	Zenit-4	S03988 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-053	1969 Jun 21 0847:58	1969-053A	IMP 5	IMP G	S03990 NASA GSFC	Thor Delta E1	482/D69	V	SLC2W	TR-1022
1969-054	1969 Jun 24 0650:00	1969-054A	Kosmos-287	Zenit-2 No. 76	S03991 MOM	Voskhod 11A57	-	NIIP-5	-	NK96-10-65
1969-055	1969 Jun 27 0659?	1969-055A	Kosmos-288	Zenit-4	S03994 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1969-056	1969 Jun 29 0315:59	1969-056A	Biosatellite 3	Biosatellite D Adapter	S04000 NASA ARC	Thor Delta N	539/D70	CC	LC17A	MOR S-883-69-
		1969-056	Biosatellite 3 Capsule	Biosatellite D SRV	A01246 NASA ARC					
1969-F09	1969 Jul 2 2255	1969-F09	STV 2	STV 2	F00540 ELDO	Europa I	F-8	WOO	LA6A	Henderson
1969-F10	1969 Jul 3 2018:32	1969-F10	L-1S No. 5	L-1S No. 5	P00543 MOM	N-1 11A52	5L	NIIP-5	LC110R	JCM
1969-057	1969 Jul 10 0900?	1969-057A	Kosmos-289	Zenit-4	S04034 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-058	1969 Jul 13 0254:42	1969-058A	Luna-15 VA	VA	A01248 MOM	Proton-K/D	242-01	NIIP-5	LC81/24	NK9810-25
		1969-058A	Luna-15 KT	E-8-5 No. 401	S04036 MOM					
1969-059	1969 Jul 16 1332:00	1969-059B	Saturn S-IVB-506	Saturn S-IVB-506	S04040 NASA MSFC	Saturn V	SA-506	LUT1,KSC	LC39A	KHR-1
		1969-059C	Eagle	LM 5 AS	S04041 NASA MSC					
		1969-059	EASEP	EASEP	A01254 NASA MSC					
		1969-059A	Columbia	Apollo CM-107	S04039 NASA MSC					
1969-U01	1969 Jul 21 1754:01	-	Eagle	LM 5 Ascent Stage	NASA MSC	LM AS	5	TRAN	LM5-DS	ApolloMR
1969-060	1969 Jul 22 1230:00	1969-060A	Kosmos-290	Zenit-2 No. 75	S04042 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1969-061	1969 Jul 22 1255?	1969-061A	Molniya-1	Molniya-1	S04043 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1969-062	1969 Jul 23 0439:55	1969-062A	OPS 1127	DAPP 7421 (FTV-6)	S04047 USAF	Thor Burner 2	279	V	SLC10W	SAC7383
1969-F11	1969 Jul 23 0900:10	1969-F11	Kosmos	DS-P1-Yu No. 23	F00548 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-063	1969 Jul 24 0130:58	1969-063A	OPS 3654	CORONA 1107	S04050 NRO/CIA	Thorad SLV-2H Agena D	545	V	SLC3W	PER
		1969-063	SRV 813	SRV 1107-1	A01263 NRO/CIA					
		1969-063	SRV 814	SRV 1107-2	A01269 NRO/CIA					
1969-064	1969 Jul 26 0206:00	1969-064A	Intelsat III F-5	Intelsat III F-5	S04051 INTELSAT	Thor Delta M	547/D71	CC	LC17A	TR-1022
1969-065	1969 Jul 31 1019	1969-065A	OPS 8285	Ferret 14	S04054 USAF/NSA	Thorad SLV-2G Agena D	523	V	SLC1W	LR690731
1969-066	1969 Aug 6 0540?	1969-066A	Kosmos- 291	IS-M GVM	S04058 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1969-067	1969 Aug 7 2348:06	1969-067A	Zond-7	L-1 No. 11	S04062 MOM	Proton-K/D	243-01	NIIP-5	LC81/23	NK9810-25
1969-068	1969 Aug 9 0752:00	1969-068B	PAC	PAC	S04066 NASA GSFC	Thor Delta N	548/D72	CC	LC17A	TR-1022
		1969-068A	OSO 6	OSO G	S04065 NASA GSFC					
1969-069	1969 Aug 12 1101:04	1969-069A	ATS 5	ATS E	S04068 NASA GSFC	SLV-3C Centaur	AC-18	CC	LC36A	TR-1022
1969-070	1969 Aug 13 2200?	1969-070A	Kosmos-292	Tsiklon	S04070 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1969-071	1969 Aug 16 1159?	1969-071A	Kosmos-293	Zenit-2M	S04072 MOM	Voskhod 11A57	-	NIIP-5	LC31	RAEX
1969-072	1969 Aug 19 1300?	1969-072A	Kosmos-294	Zenit-4	S04074 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-073	1969 Aug 22 1414:57	1969-073A	Kosmos-295	DS-P1-Yu No. 29	S04076 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-074	1969 Aug 23 1600	1969-074A	OPS 7807	KH8-23 GAMBIT	S04078 NRO/USAF	Titan IIIB	3B-23	V	SLC4W	LR690823
		1969-074	SRV-1	SRV-1	A01273 NRO/USAF					
		1969-074	SRV-2	SRV-2	A01275 NRO/USAF					
1969-F12	1969 Aug 27 2159:00	1969-F12	TETR C	TETR C	F00551 NASA GSFC	Thor Delta L	540/D73	CC	LC17A	TR-1022
		1969-F12	Pioneer E	Pioneer E	F00552 NASA ARC					
1969-075	1969 Aug 29 0905?	1969-075A	Kosmos-296	Zenit-4	S04080 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1969-076	1969 Sep 2 1100?	1969-076A	Kosmos-297	Zenit-4	S04082 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-077	1969 Sep 15 1605	1969-077A	Kosmos-298	OGCh	S04092 RVSN	R-360 8K69	Yu45201 No. 50T	NIIP-5	LC191/66	Kosmodrom9904
1969-078	1969 Sep 18 0840?	1969-078A	Kosmos-299	Zenit-4	S04097 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1969-F13	1969 Sep 22 0210	1969-F13	L-4S-4	L-4S-4	F00554 ISAS	Lambda 4S	L-4S-4	KASC	L	JCM
1969-079	1969 Sep 22 2111:02	1969-079A	OPS 3531	CORONA 1052	S04102 NRO/CIA	Thorad SLV-2G Agena D	531	V	SLC3W	PER1052
		1969-079	SRV 743R	SRV 1052-1	A01291 NRO/CIA					
		1969-079	SRV 744R	SRV 1052-2	A01297 NRO/CIA					
		1969-079B	OPS 4710	EHH B16	S04103 USAF/NSA					
1969-080	1969 Sep 23 1407:36	1969-080A	VA	VA	A01286 MOM	Proton-K/D	244-01	NIIP-5	LC81/24	NK9810-25
		1969-080A	Kosmos-300	E-8-5 No. 403	S04104 MOM					
1969-081	1969 Sep 24 1215:01	1969-081A	Kosmos-301	Zenit-2 No. 79	S04106 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1969-082	1969 Sep 30 1340	1969-082B	OPS 7613 P/L 1	NRL PL176	S04256 NRL	Thorad SLV-2G Agena D	525	V	SLC1W	JG9602
		1969-082C	Timation 2	Timation 2	S04257 NRL					
		1969-082D	OPS 7613 P/L 3	NRL PL161	S04259 NRL					
		1969-082E	OPS 7613 P/L 4	NRL PL162	S04237 NRL					
		1969-082F	OPS 7613 P/L 5	NRL PL163	S04247 NRL					
		1969-082G	OPS 7613 P/L 6	NRL PL164	S04295 NRL					
		1969-082A	OPS 1807	EHH B17	S04111 USAF/NSA					
		1969-082H	Tempsat 2	Tempsat 2	S04168 NRL					
		1969-082J	SOICAL CYLINDER	S69-4 Cylinder	S04166 NRL					
		1969-082K	SOICAL CONE	S69-4 Cone	S04132 NRL					
1969-083	1969 Oct 1 2229	1969-083A	Boreas	ESRO 1B	S04114 ESRO	Scout B	S172C	V	SLC5	VCR
1969-084	1969 Oct 6 0145:00	1969-084A	Meteor	Meteor-M	S04119 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1969-085	1969 Oct 11 1110:00	1969-085A	Soyuz-6	Soyuz No. 14	S04122 MOM	Soyuz 11A511	-	NIIP-5	LC31	Petrov71
1969-086	1969 Oct 12 1044:42	1969-086A	Soyuz-7	Soyuz No. 15	S04124 MOM	Soyuz 11A511	-	NIIP-5	LC1	Petrov71

1969-087	1969 Oct 13 1019:09	1969-087A	Soyuz-8	Soyuz No. 16	S04126 MOM	Soyuz 11A511	-	NIIP-5	LC31	Petrov71
1969-088	1969 Oct 14 1319:53	1969-088A	Interkosmos-1	DS-UJ-IK No. 1	S04128 IK	Kosmos 11K63	2I	GTSP-4	LC86/4	NK9606-11
1969-089	1969 Oct 17 1145?	1969-089A	Kosmos-302	Zenit-4	S04130 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-090	1969 Oct 18 1000:03	1969-090A	Kosmos-303	DS-P1-Yu No. 28	S04136 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-091	1969 Oct 21 1249?	1969-091A	Kosmos-304	Tsiklon	S04138 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1969-092	1969 Oct 22 1409:59	1969-092A	VA	VA	A01305 MOM	Proton-K/D	241-01	NIIP-5	LC81/24	NK9810-25
		1969-092A	Kosmos-305	E-8-5 No. 404	S04150 MOM					
1969-093	1969 Oct 24 0940?	1969-093A	Kosmos-306	Zenit-2M	S04182 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1969-094	1969 Oct 24 1301:58	1969-094A	Kosmos-307	DS-P1-Yu No. 22	S04184 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1969-095	1969 Oct 24 1810	1969-095A	OPS 8455	KH8-24 GAMBIT	S04186 NRO/USAF	Titan IIIB	3B-24	V	SLC4W	JG9602
		1969-095	SRV-1	SRV-1	A01313 NRO/USAF					
		1969-095	SRV-2	SRV-2	A01315 NRO/USAF					
1969-096	1969 Nov 4 1159:59	1969-096A	Kosmos-308	DS-P1-I No. 7	S04219 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-097	1969 Nov 8 0152	1969-097A	Azur	GRS-A	S04221 DFLVR	Scout B	S169C	V	SLC5	VCR
1969-098	1969 Nov 12 1130:00	1969-098A	Kosmos-309	Zenit-2 No. 80	S04223 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
		1969-098E	Nauka	Nauka 3KS	S04236 MOM					
1969-099	1969 Nov 14 1622	1969-099B	Saturn S-IVB-507	Saturn S-IVB-507	S04226 NASA MSFC	Saturn V	SA-507	LUT2,KSC	LC39A	KHR-1
		1969-099C	Intrepid	LM 6 AS	S04246 NASA MSC					
		1969-099A	Yankee Clipper	Apollo CM-108	S04225 NASA MSC					
		1969-099	ALSEP	ALSEP	A01317 NASA MSC					
1969-100	1969 Nov 15 0830?	1969-100A	Kosmos-310	Zenit-4	S04232 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1969-U02	1969 Nov 20 1425:56	-	Intrepid	LM 6 Ascent Stage	NASA MSC	LM AS	6	SV3	LM6-DS	ApolloMR
1969-101	1969 Nov 22 0037:00	1969-101A	Skyenet IA	Skyenet IA	S04250 UK MoD	Thor Delta M	554/D74	CC	LC17A	TR-1022
1969-102	1969 Nov 24 1100:04	1969-102A	Kosmos-311	DS-P1-Yu No. 27	S04252 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-103	1969 Nov 24 1649?	1969-103A	Kosmos-312	Sfera	S04254 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1969-F14	1969 Nov 28 0900:00	1969-F14	[Kosmos-313]	L-1e No 1	F00558 MOM	Proton-K/D	245-01	NIIP-5	LC81/23	NK9810-25
		1969-F14	LK GVM?	LK GVM?	F00561 MOM					
1969-104	1969 Dec 3 1320?	1969-104A	Kosmos-313	Zenit-2M	S04262 MOM	Voskhod 11A57	-	NIIP-53	LC43/4	RAEX
1969-105	1969 Dec 4 2137	1969-105A	OPS 6617	CORONA 1108	S04264 NRO/CIA	Thorad SLV-2H Agena D	549	V	SLC3W	JG9602
		1969-105	SRV 817	SRV 1108-1	A01328 NRO/CIA					
		1969-105	SRV 818	SRV 1108-2	A01331 NRO/CIA					
1969-106	1969 Dec 11 1258:59	1969-106A	Kosmos-314	DS-P1-Yu No. 30	S04266 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1969-107	1969 Dec 20 0326?	1969-107A	Kosmos-315	Tselina-O	S04273 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1969-108	1969 Dec 23 0925?	1969-108A	Kosmos-316	I2P	S04282 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1969-109	1969 Dec 23 1350?	1969-109A	Kosmos-317	Zenit-4MK	S04280 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1969-110	1969 Dec 25 0959:51	1969-110A	Interkosmos-2	DS-U1-IK No. 1	S04285 IK	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1969-F15	1969 Dec 27	1969-F15	Kosmos	Ionosfernaya?	F00565 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/1	AVMNLJ
1970-001	1970 Jan 9 0920?	1970-001A	Kosmos-318	Zenit-2M	S04292 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1970-002	1970 Jan 14 1843	1970-002A	OPS 6531	KH8-25 GAMBIT	S04296 NRO/USAF	Titan IIIB	3B-25	V	SLC4W	JG9602
		1970-002	SRV-1	SRV-1	A01337 NRO/USAF					
		1970-002	SRV-2	SRV-2	A01339 NRO/USAF					
1970-003	1970 Jan 15 0016:03	1970-003A	Intelsat III F-6	Intelsat III F-6	S04297 INTELSAT	Thor Delta M	557/D75	CC	LC17A	TR-1022
1970-004	1970 Jan 15 1339:59	1970-004A	Kosmos-319	DS-P1-Yu No. 25	S04299 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-005	1970 Jan 16 1059:58	1970-005A	Kosmos-320	DS-MO No. 3	S04301 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1970-006	1970 Jan 20 2020:00	1970-006A	Kosmos-321	DS-U2-MG No. 1	S04308 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-007	1970 Jan 21 1200?	1970-007A	Kosmos-322	Zenit-4	S04315 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-008	1970 Jan 23 1131:02	1970-008A	ITOS 1	Tiros M	S04320 NOAA	Thor Delta N6	542/D76	V	SLC2W	TR-1022
		1970-008B	Australis	Australis	S04321 Australis					
1970-F01	1970 Jan 30 1540:01	1970-F01	Kosmos	DS-P1-I No. 6	F00568 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-009	1970 Feb 4 0259:50	1970-009A	SERT 2	SERT 2	S04327 NASA LeRC	Thorad SLV-2G Agena D	534 (TA12)	V	SLC2E	TR-1022
1970-F02	1970 Feb 6 0416:06	1970-F02	[Luna-16]	E-8-5 No. 405	F00572 MOM	Proton-K/D	247-01	NIIP-5	LC81/23?	NK9810-25
		1970-F02	VA	VA	F00574 MOM					
1970-010	1970 Feb 10 1200?	1970-010A	Kosmos-323	Zenit-4	S04328 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-011	1970 Feb 11 0425	1970-011A	Ohsumi	L-4S-5	S04330 ISAS	Lambda 4S	L-4S-5	KASC	L	ISST9
1970-012	1970 Feb 11 0840:47	1970-012A	DAPP 1524	DAPP 5A F-1	S04331 USAF	Thor Burner 2	287	V	SLC10W	SAC7383
1970-013	1970 Feb 19 1857?	1970-013A	Molniya-1	Molniya-1	S04336 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1970-014	1970 Feb 27 1724:55	1970-014A	Kosmos-324	DS-P1-Yu No. 32	S04338 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-015	1970 Mar 4 1214:42	1970-015A	Kosmos-325	Zenit-2 No. 73	S04340 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1970-016	1970 Mar 4 2215	1970-016A	OPS 0440	CORONA 1109	S04342 NRO/CIA	Thorad SLV-2H Agena D	551	V	SLC3W	JG9602
		1970-016	SRV 819	SRV 1109-1	A01351 NRO/CIA					
		1970-016	SRV 820	SRV 1109-2	A01355 NRO/CIA					
		1970-016B	OPS 3402	EHH B18	S04343 USAF/NSA					
1970-017	1970 Mar 10 1220	1970-017B	Mika	DIAL Mini Kapsel	S04345 CNES/BMwF	Diamant B	No. 1	CSG	Diamant	JCM
		1970-017A	Wika	DIAL Wissenschaftliche Ka	S04344 CNES/BMwF					
1970-018	1970 Mar 13 0800:02	1970-018A	Kosmos-326	Zenit-2 No. 74	S04346 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-10-65
1970-019	1970 Mar 17 1110:01	1970-019A	Meteor	Meteor	S04349 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1970-020	1970 Mar 18 1439:56	1970-020A	Kosmos-327	DS-P1-I No. 8	S04351 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-021	1970 Mar 20 2352:00	1970-021A	NATO IIA	NATO IIA	S04353 NATO	Thor Delta M	558/D77	CC	LC17A	TR-1022
1970-022	1970 Mar 27 1145?	1970-022A	Kosmos-328	Zenit-4MK	S04355 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-023	1970 Apr 3 0830?	1970-023A	Kosmos-329	Zenit-2M	S04357 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-024	1970 Apr 7 1110?	1970-024A	Kosmos-330	Tselina-O	S04360 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1970-025	1970 Apr 8 0817:56	1970-025A	Nimbus 4	Nimbus D	S04362 NASA GSFC	Thorad SLV-2G Agena D	553 (TA13)	V	SLC2E	TR-1022
		1970-025B	TOPO 1	TOPO 1	S04363 USA TOPO					
1970-026	1970 Apr 8 1015?	1970-026A	Kosmos-331	Zenit-4	S04364 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1970-027	1970 Apr 8 1050:01	1970-027A	Vela 6A	Vela 6A	S04366 USAF	Titan IIIC	3C-18	CC	LC40	PH960801
		1970-027B	Vela 6B	Vela 6B	S04368 USAF					
1970-028	1970 Apr 11 1700?	1970-028A	Kosmos-332	Tsiklon	S04369 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1970-029	1970 Apr 11 1913	1970-029B	Saturn S-IVB-508	Saturn S-IVB-508	S04372 NASA MSFC	Saturn V	SA-508	LUT3,KSC	LC39A	KHR-1
		1970-029	Aquarius	LM 7 AS	A01363 NASA MSC					
		1970-029	LM 7 DS	LM 7 DS	A01364 NASA MSC					
		1970-029A	Odyssey	Apollo CM-109	S04371 NASA MSC					
		1970-029	ALSEP	ALSEP	A01366 NASA MSC					



1970-030	1970 Apr 15 0900?	1970-030A	Kosmos-333	Zenit-4M	S04373 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1970-031	1970 Apr 15 1552	1970-031A	OPS 2863	KH8-26 GAMBIT	S04375 NRO/USAF	Titan IIIB	3B-26	V	SLC4W	JG9602
		1970-031	SRV-1	SRV-1	A01370 NRO/USAF					
		1970-031	SRV-2	SRV-2	A01372 NRO/USAF					
1970-032	1970 Apr 23 0046:12	1970-032A	Intelsat III F-7	Intelsat III F-7	S04376 INTELSAT	Thor Delta M	559/D78	CC	LC17A	TR-1022
1970-033	1970 Apr 23 1320:00	1970-033A	Kosmos-334	DS-P1-Yu No. 31	S04378 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-034	1970 Apr 24 1335	1970-034A	DFH-1	Dong Fang Hong	S04382 MAI	Chang Zheng 1	-	JQ	LA2A	Harvey
1970-035	1970 Apr 24 2224:49	1970-035A	Kosmos-335	DS-U1-R No. 1	S04380 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1970-036	1970 Apr 25 1709?	1970-036A	Kosmos-336	Strela-1M	S04383 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
		1970-036B	Kosmos-337	Strela-1M	S04384 MO SSSR					
		1970-036C	Kosmos-338	Strela-1M	S04385 MO SSSR					
		1970-036D	Kosmos-339	Strela-1M	S04386 MO SSSR					
		1970-036E	Kosmos-340	Strela-1M	S04387 MO SSSR					
		1970-036F	Kosmos-341	Strela-1M	S04388 MO SSSR					
		1970-036G	Kosmos-342	Strela-1M	S04389 MO SSSR					
		1970-036H	Kosmos-343	Strela-1M	S04390 MO SSSR					
1970-037	1970 Apr 28 1050:00	1970-037A	Meteor	Meteor	S04393 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1970-038	1970 May 12 1010:01	1970-038A	Kosmos-344	Zenit-2 No. 81	S04401 MOM	Vokhod 11A57	-	NIIP-53	-	NK96-10-65
1970-039	1970 May 20 0920?	1970-039A	Kosmos-345	Zenit-4	S04403 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-040	1970 May 20 2135	1970-040A	OPS 4720	CORONA 1110	S04405 NRO/CIA	Thorad SLV-2H Agena D	555	V	SLC3W	LR700521
		1970-040	SRV 821	SRV 1110-1	A01381 NRO/CIA					
		1970-040	SRV 822	SRV 1110-2	A01383 NRO/CIA					
		1970-040B	OPS 8520	EHH B19	S04406 USAF/NSA					
1970-F03	1970 May 22 1239:55	1970-F03	Kosmos	DS-P1-Yu No. 36	F00579 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-041	1970 Jun 1 1900:00	1970-041A	Soyuz-9	Soyuz No. 17	S04407 MOM	Soyuz 11A511	-	NIIP-5	-	Petrov71
1970-042	1970 Jun 10 0930?	1970-042A	Kosmos-346	Zenit-4	S04409 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-F04	1970 Jun 12 0110	1970-F04	STV 3	STV 3	F00581 ELDO	Europa I	F-9	WOO	LA6A	Morton
1970-043	1970 Jun 12 0930:02	1970-043A	Kosmos-347	DS-P1-Yu No. 35	S04411 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1970-044	1970 Jun 13 0459:58	1970-044A	Kosmos-348	DS-U2-GK No. 2	S04413 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-045	1970 Jun 17 1259?	1970-045A	Kosmos-349	Zenit-4	S04416 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1970-046	1970 Jun 19 1137	1970-046A	APP-720	RHYOLITE 1	S04418 USAF	SLV-3A Agena D	5201A	CC	LC13	ETR-IDX-FY70
1970-047	1970 Jun 23 1415:00	1970-047A	Meteor	Meteor-MV	S04419 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1970-048	1970 Jun 25 1450	1970-048A	OPS 6820	KH8-27 GAMBIT	S04422 NRO/USAF	Titan IIIB	3B-27	V	SLC4W	LR700625
		1970-048	SRV-1	SRV-1	A01392 NRO/USAF					
		1970-048	SRV-2	SRV-2	A01394 NRO/USAF					
1970-049	1970 Jun 26 0323?	1970-049A	Molniya-1	Molniya-1	S04430 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1970-050	1970 Jun 26 1200?	1970-050A	Kosmos-350	Zenit-2M	S04425 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-051	1970 Jun 27 0739:55	1970-051A	Kosmos-351	DS-P1-Yu No. 38	S04427 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-F05	1970 Jun 27	1970-F05	Kosmos	Strela-2	F00583 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/1	AVMNLJ
1970-052	1970 Jul 7 1030?	1970-052A	Kosmos-352	Zenit-4	S04446 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-053	1970 Jul 9 1335?	1970-053A	Kosmos-353	Zenit-2M	S04455 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1970-F06	1970 Jul 21	1970-F06	[Kosmos]	Zenit-4	F00585 MOM	Vokhod 11A57	-	NIIP-53	LC43/4	AVMNLJ
1970-054	1970 Jul 23 0125	1970-054A	OPS 4324	CORONA 1111	S04477 NRO/CIA	Thorad SLV-2H Agena D	556	V	SLC3W	PER
		1970-054	SRV 823	SRV 1111-1	A01402 NRO/CIA					
		1970-054	SRV 824	SRV 1111-2	A01404 NRO/CIA					
1970-055	1970 Jul 23 2323:00	1970-055A	Intelsat III F-8	Intelsat III F-8	S04478 INTELSAT	Thor Delta M	563/D79	CC	LC17A	TR-1022
1970-056	1970 Jul 28 2200:28	1970-056A	Kosmos-354	OGCh	S04481 RVSN	R-360 8K69	Yu45201 No. 49T	NIIP-5	LC191/66	Kosmodrom9904
1970-057	1970 Aug 7 0259:53	1970-057A	Interkosmos-3	DS-U2-1K No. 1	S04482 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1970-058	1970 Aug 7 0930?	1970-058A	Kosmos-355	Zenit-4	S04484 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1970-059	1970 Aug 10 1959:55	1970-059A	Kosmos-356	DS-U2-MG No. 2	S04487 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-060	1970 Aug 17 0538:22	1970-060A	SA	SA	A01454 MOM	Molniya 8K78M	-	NIIP-5	-	Petrov71
		1970-060A	Venera-7	4V-1 No. 630	S04489 MOM					
1970-061	1970 Aug 18 1445	1970-061A	OPS 7874	KH8-28 GAMBIT	S04492 NRO/USAF	Titan IIIB	3B-28	V	SLC4W	LR700818
		1970-061	SRV-1	SRV-1	A01410 NRO/USAF					
		1970-061	SRV-2	SRV-2	A01412 NRO/USAF					
1970-062	1970 Aug 19 1211:00	1970-062A	Skynet IB	Skynet IB	S04493 UK MoD	Thor Delta M	561/D80	CC	LC17A	TR-1022
1970-063	1970 Aug 19 1459:53	1970-063A	Kosmos-357	DS-P1-Yu No. 40	S04495 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-064	1970 Aug 20 1430?	1970-064A	Kosmos-358	Lira	S04497 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1970-065	1970 Aug 22 0506:09	1970-065A	SA	SA	A01414 MOM	Molniya 8K78M	-	NIIP-5	-	NK9701-29
		1970-065A	Kosmos-359	4V-1 No. 631	S04501 MOM					
1970-066	1970 Aug 26 1001	1970-066A	OPS 8329	Ferret 15	S04503 USAF/NSA	Thorad SLV-2G Agena D	535	V	SLC1W	LR700826
1970-067	1970 Aug 27 1323:34	1970-067A	NNS O-19	NNS O-19	S04507 USN	Scout A	S176C	V	SLC5	VCR
1970-068	1970 Aug 29 0830?	1970-068A	Kosmos-360	Zenit-4M	S04508 MOM	Vokhod 11A57	-	NIIP-5	LC31	RAEX
1970-069	1970 Sep 1 0100	1970-069A	OPS 7329	CANYON 3	S04510 USAF	SLV-3A Agena D	5203A	CC	LC13	AFMTC
1970-F07	1970 Sep 2 0034	1970-F07	R-2 Instrument Package	R-2	F00588 RAE	Black Arrow	R-2	WOO	LA5B	Morton
		1970-F07	Orba	X-2	F00589 RAE					
1970-070	1970 Sep 3 0839:45	1970-070A	DAPP 2525	DAPP 5A F-2 (FTV-12)	S04512 USAF	Thor Burner 2	288	V	SLC10W	SAC7383
1970-071	1970 Sep 8 1030?	1970-071A	Kosmos-361	Zenit-4M	S04524 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1970-072	1970 Sep 12 1325:53	1970-072A	Luna-16 VA	VA	A01419 MOM	Proton-K/D	248-01	NIIP-5	LC81/23	NK9810-25
		1970-072A	Luna-16 KT	E-8-5 No. 406	S04527 MOM					
1970-073	1970 Sep 16 1159:55	1970-073A	Kosmos-362	DS-P1-I No. 9	S04536 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-074	1970 Sep 17 0810?	1970-074A	Kosmos-363	Zenit-2M	S04538 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-U01	1970 Sep 21 0743	-	Luna-16 VA	E-8-5 VA No. 406	MOM	E-8-5 VA	No. 406	FEC	KT-406	JCH
1970-075	1970 Sep 22 1300?	1970-075A	Kosmos-364	Zenit-4MK	S04553 MOM	Vokhod 11A57	-	NIIP-53	-	RAEX
1970-F08	1970 Sep 25	1970-F08	MS-F1	MS-F1	F00592 ISAS	Mu-4S	M-4S-1	KASC	M	SRJ
1970-076	1970 Sep 25 1405	1970-076A	Kosmos-365	OGCh	S04556 RVSN	R-360 8K69M	4502741260	NIIP-5	LC191/66	Kosmodrom9904
1970-077	1970 Sep 29 0814?	1970-077A	Molniya-1	Molniya-1	S04569 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1970-078	1970 Oct 1 0820?	1970-078A	Kosmos-366	Zenit-2M	S04561 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-079	1970 Oct 3 1026?	1970-079C	Kosmos-367	US-A	S04566 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1970-080	1970 Oct 8 1239?	1970-080A	Kosmos-368	Zenit-2M (Bion)	S04571 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX
1970-081	1970 Oct 8 1510:03	1970-081A	Kosmos-369	DS-P1-Yu No. 42	S04573 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-082	1970 Oct 9 1104?	1970-082A	Kosmos-370	Zenit-4M	S04576 MOM	Vokhod 11A57	-	NIIP-5	-	RAEX

1970-083	1970 Oct 12 1357?	1970-083A	Kosmos-371	Tsiklon	S04578 MO SSSR	Kosmos 11K65M	-	NIIP-53	-	RAEX
1970-084	1970 Oct 14 1129:58	1970-084A	Interkosmos-4	DS-U3-1K No. 2	S04580 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1970-085	1970 Oct 15 1122:02	1970-085A	Meteor	Meteor-M	S04583 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1970-086	1970 Oct 16 1459?	1970-086A	Kosmos-372	Strela-2	S04588 MO SSSR	Kosmos 11K65M	53717-04	NIIP-53	LC132/1	RAEX
1970-087	1970 Oct 20 0538?	1970-087A	Kosmos-373	IS-M	S04590 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1970-088	1970 Oct 20 1955:39	1970-088A	Zond-8	L-1 No. 14	S04591 MOM	Proton-K/D	250-01	NIIP-5	LC81/23	NK9810-25
1970-089	1970 Oct 23 0442?	1970-089A	Kosmos-374	I2P	S04594 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1970-090	1970 Oct 23 1740	1970-090A	OPS 7568	KH8-29 GAMBIT	S04596 NRO/USAF	Titan IIB	3B-29	V	SLC4W	LR701024
		1970-090	SRV-1	SRV-1	A01437 NRO/USAF					
		1970-090	SRV-2	SRV-2	A01439 NRO/USAF					
1970-091	1970 Oct 30 0236?	1970-091A	Kosmos-375	I2P	S04598 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1970-092	1970 Oct 30 1320?	1970-092A	Kosmos-376	Zenit-4M	S04599 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-093	1970 Nov 6 1035:57	1970-093A	DSP F1	DSP 1	S04630 USAF	Titan IIIC	23C-1 (3C-19)	CC	LC40	PH960801
1970-094	1970 Nov 9 0600	1970-094A	OFO	OFO	S04690 NASA ARC/WS	Scout B	S178C	WI	LA3A	? LAAFB
		1970-094B	RM	RM	S04692 NASA MSC					
1970-095	1970 Nov 10 1444:01	1970-095	Lunokhod-1	8EL No. 203	A01443 MOM	Proton-K/D	251-01	NIIP-5	LC81/23	NK9810-25
		1970-095A	Luna-17	E-8 No. 203	S04691 MOM					
1970-096	1970 Nov 11 0920?	1970-096A	Kosmos-377	Zenit-2M	S04695 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1970-097	1970 Nov 17 1820:01	1970-097A	Kosmos-378	DS-U2-1P No. 1	S04713 MO SSSR	Kosmos 11K65M	47117-107	NIIP-53	LC132/2	AVMDS
1970-098	1970 Nov 18 2129	1970-098A	OPS 4992	CORONA 1112	S04721 NRO/CIA	Thorad SLV-2H Agena D	552	V	SLC3W	PER
		1970-098	SRV 827	SRV 1112-1	A01453 NRO/CIA					
		1970-098	SRV 828	SRV 1112-2	A01458 NRO/CIA					
		1970-098B	OPS 6829	EHH B20	S04722 USAF/NSA					
1970-099	1970 Nov 24 0515?	1970-099A	Kosmos-379	TKZ No. 1	S04760 MOM	Soyuz 11A511L	-	NIIP-5	LC31	RAEX
1970-100	1970 Nov 24 1059:56	1970-100A	Kosmos-380	DS-P1-Yu No. 26	S04762 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-101	1970 Nov 27 1547?	1970-101A	Molniya-1	Molniya-1	S04779 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1970-F09	1970 Nov 30 2240:05	1970-F09	OA0 B	OA0 B	F00594 NASA GSFC	SLV-3C Centaur	AC-21	CC	LC36B	TR-1022
1970-102	1970 Dec 2 0400?	1970-102A	Kosmos-381	Ionosferniya?	S04783 MO SSSR	Kosmos 11K65M	47117-105	NIIP-53	LC132/2	RAEX
1970-103	1970 Dec 2 1700:00	1970-103A	Kosmos-382	L-1e No. 2K	S04786 MOM	Proton-K/D	252-01	NIIP-5	LC81/23	NK9810-25
		1970-103E	LK GVM?	LK GVM	S05326 MOM					
1970-104	1970 Dec 3 1355?	1970-104A	Kosmos-383	Zenit-4MK	S04787 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-105	1970 Dec 10 1110?	1970-105A	Kosmos-384	Zenit-2M	S04791 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1970-106	1970 Dec 11 1135:00	1970-106B	CEPE	CEP	S04794 NASA GSFC	Thor Delta N6	546/D81	V	SLC2W	TR-1022
		1970-106A	NOAA 1	ITOS A	S04793 NOAA					
1970-107	1970 Dec 12 1053:50	1970-107A	Uhuru	SAS A	S04797 NASA GSFC	Scout B	S175C	SMLC		LAAFB
1970-108	1970 Dec 12 1300?	1970-108A	Kosmos-385	Tsiklon	S04799 MO SSSR	Kosmos 11K65M	V149-39	NIIP-53	LC132/2	RAEX
1970-109	1970 Dec 12 1304	1970-109A	Peole	Peole	S04801 CNES	Diamant B	No. 2	CSG	Diamant	LeMonde701213
1970-110	1970 Dec 15 1000?	1970-110A	Kosmos-386	Zenit-4M	S04804 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1970-111	1970 Dec 16 0429?	1970-111A	Kosmos-387	Tselina-O	S04806 MO SSSR	Kosmos 11K65M	V149-31	NIIP-53	LC132/2	RAEX
1970-112	1970 Dec 18 0939:13	1970-112A	Kosmos-388	DS-P1-Yu No. 43	S04811 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1970-113	1970 Dec 18 1615?	1970-113A	Kosmos-389	Tselina-D	S04813 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1970-F10	1970 Dec 22 2130	1970-F10	Kosmos	DS-P1-M No. 1	F00596 MO SSSR	Kosmos 11K65M	47117-106	NIIP-53	LC132/2	AVMDS
1970-114	1970 Dec 25 0350?	1970-114A	Molniya-1	Molniya-1	S04829 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1971-001	1971 Jan 12 0930?	1971-001A	Kosmos-390	Zenit-4M	S04845 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-002	1971 Jan 14 1200:00	1971-002A	Kosmos-391	DS-P1-I No. 11	S04847 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1971-003	1971 Jan 20 1124:00	1971-003A	Meteor	Meteor-M	S04849 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1971-004	1971 Jan 21 0840?	1971-004A	Kosmos-392	Zenit-2M	S04872 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-005	1971 Jan 21 1828?	1971-005A	OPS 7776	KH8-30 GAMBIT	S04874 NRO/USAF	Titan 23B	3B-30	V	SLC4W	RAE
		1971-005	SRV-1	SRV-1	A01475 NRO/USAF					
		1971-005	SRV-2	SRV-2	A01477 NRO/USAF					
1971-006	1971 Jan 26 0036:03	1971-006A	Intelsat IV F2	Intelsat IV F2	S04881 Intelsat	SLV-3C Centaur	AC-25	CC	LC36A	TR-1022
1971-007	1971 Jan 26 1244:33	1971-007A	Kosmos-393	DS-P1-Yu No. 34	S04884 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1971-008	1971 Jan 31 2103	1971-008B	Saturn S-IVB-509	Saturn S-IVB-509	S04904 NASA MSFC	Saturn V	SA-509	LUT2, KSC	LC39A	KHR-1
		1971-008C	Antares	LM 8 AS	S04905 NASA MSC					
		1971-008	LM 8 DS	LM 8 DS	A01482 NASA MSC					
		1971-008A	Kitty Hawk	Apollo CM-110	S04900 NASA MSC					
		1971-008	ALSEP	ALSEP	A01485 NASA MSC					
1971-009	1971 Feb 3 0141:40	1971-009A	NATO IIB	NATO IIB	S04902 NATO	Thor Delta M	560/D82	CC	LC17A	TR-1022
1971-U01	1971 Feb 6 1848	-	Antares	LM 8 Ascent Stage	NASA MSC	LM AS	8	FMR	LM8-DS	ApolloMR
1971-010	1971 Feb 9 1848:48	1971-010A	Kosmos-394	DS-P1-M No. 2	S04922 MO SSSR	Kosmos 11K65M	65027-119	NIIP-53	LC132/1	AVMDS
1971-011	1971 Feb 16 0400	1971-011A	Tansei-1	MS-T1	S04952 ISAS	Mu-4S	M-4S-2	KASC	M	ISST9
1971-012	1971 Feb 17 0352:05	1971-012A	DAPP 3526	DAPP 5A F-3 (FTV-10)	S04953 USAF	Thor Burner 2	249	V	SLC10W	SAC7383
		1971-012C	S70-3 Drag Sphere	NRL P1170A	S04957 NRL					
		1971-012D	S70-3 Drag Sphere	NRL P1170B	S04958 NRL					
		1971-012E	S70-3 Drag Sphere	NRL P1170C	S04963 NRL					
1971-F01	1971 Feb 17 2004:30	1971-F01	OPS 3297	CORONA 1113	F00598 NRO/CIA	Thorad SLV-2H Agena D	537	V	SLC3W	PER1113
		1971-F01	SRV 825	SRV 1113-1	F00600 NRO/CIA					
		1971-F01	SRV 826	SRV 1113-2	F00602 NRO/CIA					
1971-013	1971 Feb 17 2109?	1971-013A	Kosmos-395	Tselina-O	S04955 MO SSSR	Kosmos 11K65M	53727-117	NIIP-53	LC132/1	RAEX
1971-014	1971 Feb 18 1359?	1971-014A	Kosmos-396	Zenit-4M	S04959 MOM	Voskhod 11A57	-	NIIP-53	LC43/3	RAEX
1971-015	1971 Feb 25 1111?	1971-015A	Kosmos-397	I2P	S04964 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1971-016	1971 Feb 26 0506?	1971-016A	Kosmos-398	TKZ No. 2	S04966 MOM	Soyuz 11A511L	-	NIIP-5	LC31	RAEX
1971-017	1971 Mar 3 0930?	1971-017A	Kosmos-399	Zenit-4M	S05003 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-018	1971 Mar 3 1204	1971-018A	Shi Jian	Shi Jian	S05007 MAI	Chang Zheng 1	-	JQ	LA2A	JCM
1971-F03	1971 Mar 5	1971-F03	[Kosmos]	Zenit-2M	F00608 MOM	Voskhod 11A57	-	NIIP-53	-	AVMNLJ
1971-F02	1971 Mar 5 0815:02	1971-F02	Kosmos	DS-P1-Yu No. 39	F00606 MO SSSR	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1971-019	1971 Mar 13 1615:00	1971-019A	IMP 6	IMP I	S05043 NASA GSFC	Thor Delta M6	562/D83	CC	LC17A	TR-1022
1971-020	1971 Mar 18 2145:00	1971-020A	Kosmos-400	DS-P1-M No. 3	S05050 MO SSSR	Kosmos 11K65M	65027-118	NIIP-53	LC132/1	AVMDS
1971-021	1971 Mar 21 0345	1971-021A	OPS 4788	Jumpseat 1	S05053 USAF/NSA	Titan 33B	3B-36 (33B-1)	V	SLC4W	LR710322
1971-022	1971 Mar 24 2105	1971-022A	OPS 5300	CORONA 1114	S05059 NRO/CIA	Thorad SLV-2H Agena D	538	V	SLC3W	PER
		1971-022	SRV 829	SRV 1114-1	A01495 NRO/CIA					
		1971-022	SRV 830	SRV 1114-2	A01500 NRO/CIA					

1971-023	1971 Mar 27 1059?	1971-023A	Kosmos-401	Zenit-4M	S05086 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1971-024	1971 Apr 1 0257:07	1971-024A	Isis 2	Isis B	S05104 CRC	Thor Delta E1	491/D84	V	SLC2E	TR-1022
1971-025	1971 Apr 1 1129?	1971-025B	Kosmos-402	US-A	S05107 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1971-026	1971 Apr 2 0820?	1971-026A	Kosmos-403	Zenit-2M	S05108 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1971-027	1971 Apr 4 1427?	1971-027A	Kosmos-404	I2P	S05113 PKO	Tsiklon-2	-	NIIP-5	-	RAEX
1971-028	1971 Apr 7 0710?	1971-028A	Kosmos-405	Tselina-D	S05117 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1971-029	1971 Apr 14 0800?	1971-029A	Kosmos-406	Zenit-4M	S05124 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1971-030	1971 Apr 15 0919	1971-030A	Tournesol	D-2A	S05128 CNES	Diamant B	No. 3	CSG	Diamant	JCM
1971-031	1971 Apr 17 1144:58	1971-031A	Meteor	Meteor-M	S05142 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1971-032	1971 Apr 19 0140:00	1971-032A	Salyut	DOS-1 17K No. 121	S05160 MOM	Proton-K	254-01	NIIP-5	LC81/24	NK9810-25
1971-033	1971 Apr 22 1530	1971-033A	OPS 7899	KH8-31 GAMBIT	S05171 NRO/USAF	Titan 23B	3B-31	V	SLC4W	LR710422
		1971-033	SRV-1	SRV-1	A01506 NRO/USAF					
		1971-033	SRV-2	SRV-2	A01508 NRO/USAF					
1971-034	1971 Apr 22 2354:06	1971-034A	Soyuz-10	Soyuz 7K-T No. 31	S05172 MOM	Soyuz 11A511	25	NIIP-5	LC1	NK96-11-46
1971-035	1971 Apr 23 1130?	1971-035A	Kosmos-407	Strela-2	S05174 MO SSSR	Kosmos 11K65M	53727-116	NIIP-53	LC132/1	RAEX
1971-036	1971 Apr 24 0732:29	1971-036A	San Marco 3	San Marco C	S05176 CRS	Scout B	S173C	SMLC		LAAPB
1971-037	1971 Apr 24 1115:02	1971-037A	Kosmos-408	DS-P1-Yu No. 37	S05177 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1971-038	1971 Apr 28 1435?	1971-038A	Kosmos-409	Sfera	S05180 MO SSSR	Kosmos 11K65M	53727-115	NIIP-53	LC132/1	RAEX
1971-039	1971 May 5 0743:01	1971-039A	DSP F2	DSP 3	S05204 USAF	Titan IIIC	23C-2 (3C-20)	CC	LC40	PH960801
1971-040	1971 May 6 0620?	1971-040A	Kosmos-410	Zenit-2M	S05207 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
		1971-040C	Nauka	Nauka	S05228 MOM					
1971-041	1971 May 7 1420?	1971-041A	Kosmos-411	Strela-1M	S05210 MO SSSR	Kosmos 11K65M	53727-121	NIIP-53	LC132/1	RAEX
		1971-041B	Kosmos-412	Strela-1M	S05211 MO SSSR					
		1971-041C	Kosmos-413	Strela-1M	S05212 MO SSSR					
		1971-041D	Kosmos-414	Strela-1M	S05213 MO SSSR					
		1971-041E	Kosmos-415	Strela-1M	S05214 MO SSSR					
		1971-041F	Kosmos-416	Strela-1M	S05215 MO SSSR					
		1971-041G	Kosmos-417	Strela-1M	S05216 MO SSSR					
		1971-041H	Kosmos-418	Strela-1M	S05217 MO SSSR					
1971-F04	1971 May 9 0111:02	1971-F04	Mariner 8	Mariner 71H	F00611 NASA/JPL	SLV-3C Centaur	AC-24	CC	LC36A	JPL-TR-32-
1971-042	1971 May 10 1658:42	1971-042A	Kosmos-419	3MS No. 170	S05221 MOM	Proton-K/D	253-01	NIIP-5	LC81/23	NK9810-25
1971-043	1971 May 18 0800?	1971-043A	Kosmos-420	Zenit-4M	S05230 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-044	1971 May 19 1020:00	1971-044A	Kosmos-421	DS-P1-Yu No. 48	S05232 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1971-045	1971 May 19 1622:44	1971-045D	SA	SA	S05739 MOM	Proton-K/D	255-01	NIIP-5	LC81/24	NK9810-25
		1971-045A	Mars-2	4M No. 171	S05234 MOM					
		1971-045	PROP-M	PROP-M	A01518 MOM					
1971-046	1971 May 22 0051?	1971-046A	Kosmos-422	Tsiklon	S05238 MO SSSR	Kosmos 11K65M	53727-120	NIIP-53	LC132/1	RAEX
1971-047	1971 May 27 1159:55	1971-047A	Kosmos-423	DS-P1-Yu No. 47	S05246 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1971-048	1971 May 28 1030?	1971-048A	Kosmos-424	Zenit-4M	S05248 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1971-049	1971 May 28 1526:30	1971-049E	SA	SA	S05667 MOM	Proton-K/D	249-01	NIIP-5	LC81/23	NK9810-25
		1971-049A	Mars-3	4M No. 172	S05252 MOM					
		1971-049	PROP-M	PROP-M	A01520 MOM					
1971-050	1971 May 29 0349?	1971-050A	Kosmos-425	Tselina-O	S05253 MO SSSR	Kosmos 11K65M	Z149-30	NIIP-53	LC132/1	RAEX
1971-051	1971 May 30 2223:04	1971-051A	Mariner 9	Mariner 71J	S05261 NASA/JPL	SLV-3C Centaur	AC-23	CC	LC36B	JPL-TR-32-
1971-052	1971 Jun 4 1810:00	1971-052A	Kosmos-426	DS-U2-K No. 1	S05281 MO SSSR	Kosmos 11K65M	65014-101	NIIP-53	LC132/2	AVMDS
1971-053	1971 Jun 6 0455:09	1971-053A	Soyuz-11	Soyuz 7K-T No. 32	S05283 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1971-054	1971 Jun 8 1400:05	1971-054A	P70-1	P70-1	S05285 USAF STP	Thor Burner 2	210	V	SLC10W	SAC7383
1971-055	1971 Jun 11 1000?	1971-055A	Kosmos-427	Zenit-4MK	S05289 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1971-056	1971 Jun 15 1841	1971-056A	OPS 7809	KH9-1 HEXAGON	S05297 NRO/CIA	Titan IIID	23D-1	V	SLC4E	JCM
		1971-056	SRV-1	SRV-1	A01466 NRO					
		1971-056	SRV-2	SRV-2	A01468 NRO					
		1971-056	SRV-3	SRV-3	A01470 NRO					
		1971-056	SRV-4	SRV-4	A01472 NRO					
1971-057	1971 Jun 24 0759?	1971-057A	Kosmos-428	Zenit-2M	S05305 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
		1971-057G	Nauka	Nauka	S05315 MOM					
1971-F05	1971 Jun 25	1971-F05	{Kosmos}	Zenit-4M	F00613 MOM	Voskhod 11A57	-	NIIP-53	-	AVMNLJ
1971-F06	1971 Jun 26 2315:08	1971-F06	LK	LK	F00620 MOM	N-1 11A52	6L	NIIP-5	LC110L	JCM
		1971-F06	LOK	LOK	F00622 MOM					
1971-058	1971 Jul 8 2258	1971-058A	Solrad 10	Solar Explorer C	S05317 NRL	Scout B	S177C	WI	LA3A	? LAAPB
1971-059	1971 Jul 16 0141:36	1971-059A	Meteor	Meteor-M	S05327 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1971-060	1971 Jul 16 1050	1971-060A	OPS 8373	Ferret 16	S05329 USAF/NSA	Thorad SLV-2H Agena D	550	V	SLC1W	LR710716
1971-061	1971 Jul 20 1000?	1971-061A	Kosmos-429	Zenit-4M	S05331 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-F07	1971 Jul 22	1971-F07	Kosmos	Tselina-O	F00625 MO SSSR	Kosmos 11K65M	Yu149-32	NIIP-53	LC132/2	AVMNLJ
1971-062	1971 Jul 23 1100?	1971-062A	Kosmos-430	Zenit-4M	S05340 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1971-063	1971 Jul 26 1334	1971-063B	Saturn S-IVB-510	Saturn S-IVB-510	S05352 NASA MSFC	Saturn V	SA-510	LUT3,KSC	LC39A	KHR-1
		1971-063C	Falcon	LM 10 AS	S05366 NASA MSC					
		1971-063	ALSEP	LM 10 DS	A01535 NASA MSC					
		1971-063	LM 10 DS	LM 10 DS	A01533 NASA MSC					
		1971-063	LRV-1	LRV-1	A01536 NASA MSC					
		1971-063A	Endeavour	Apollo CM-112	S05351 NASA MSC					
		1971-063D	Apollo 15 Subsatellite	Apollo 15 Subsatellite	S05377 NASA MSC					
1971-064	1971 Jul 28 0329?	1971-064A	Molniya-1	Molniya-1	S05367 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1971-065	1971 Jul 30 0829?	1971-065A	Kosmos-431	Zenit-2M	S05364 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-U02	1971 Aug 2 1711:23	-	Falcon	LM 10 Ascent Stage	-	LM AS	10	HAD	LM10-DS	ApolloMR
1971-F08	1971 Aug 3 1100:00	1971-F08	Kosmos	DS-P1-Yu No. 33	F00628 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1971-066	1971 Aug 5 1000?	1971-066A	Kosmos-432	Zenit-4M	S05379 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1971-067	1971 Aug 7 0011	1971-067A	OVI-20	OVI-20P	S05394 USAF STP	Atlas F	76F	V	BMRSA2	JCM
		1971-067C	LOADS 2	OAR-901	S05382 USAF STP					
		1971-067B	OVI-21P	OVI-21P	S05397 USAF STP					
		1971-067D	RTDS	OAR-907	S05383 USAF STP					



			1971-067F	LCS 4	LCS 4	S05396 USA							
			1971-067P	AVL-802 Mylar Sphere	AVL-802	S05410 USAF							
			1971-067E	AVL-802 Grid Sphere 7-1	AVL-802	S05398 USAF							
			1971-067G	AVL-802 Grid Sphere 7-2	AVL-802	S05401 USAF							
			1971-067H	AVL-802 Rigid Sphere	RDT-701	S05406 USAF							
1971-068	1971 Aug 8	2345?	1971-068A	Kosmos-433	OGCH	S05402 RVSN	-		NIIP-5	LC191/66		RAEX	
1971-069	1971 Aug 12	0530?	1971-069A	Kosmos-434	T2K No. 3	S05407 MOM	-		NIIP-5	LC31		RAEX	
1971-070	1971 Aug 12	1530	1971-070A	OPS 8607	KH8-32 GAMBIT	S05409 NRO/USAF	R-360 8K69M						
			1971-070	SRV-1	SRV-1	A01546 NRO/USAF	Titan 24B	3B-32 (24B-1)	V	SLC4W		LR710911	
			1971-070	SRV-2	SRV-2	A01548 NRO/USAF							
1971-071	1971 Aug 16	1839	1971-071A	Eole	Eole	S05435 CNES	Scout B-1	S180C	WI	LA3A		LAAFB	
1971-F09	1971 Aug 19		1971-F09	[Kosmos]	Zenit-4M	F00630 MOM	Voskhod 11A57	-	NIIP-5	-		AVMNLJ	
1971-072	1971 Aug 27	1054:56	1971-072A	Kosmos-435	DS-P1-Yu No. 41	S05441 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1971-073	1971 Sep 2	1340:40	1971-073A	Luna-18 VA	Luna-18 VA	A01552 MOM	Proton-K/D	256-01	NIIP-5	LC81/24		NK9810-25	
			1971-073A	Luna-18 KT	E-8-5 No. 407	S05448 MOM							
1971-074	1971 Sep 7	0115?	1971-074A	Kosmos-436	Tselina-O	S05461 MO SSSR	Kosmos 11K65M	Yu149-42	NIIP-53	LC132/2		RAEX	
1971-075	1971 Sep 10	0337?	1971-075A	Kosmos-437	Tselina-O	S05466 MO SSSR	Kosmos 11K65M	65014-106	NIIP-53	LC132/2		RAEX	
1971-076	1971 Sep 10	2133	1971-076A	OPS 5454	CORONA 1115	S05468 NRO/CIA	Thorad SLV-2H Agena D	567	V	SLC3W		LR710911	
			1971-076	SRV 831	SRV 1115-1	A01557 NRO/CIA							
			1971-076	SRV 832	SRV 1115-2	A01563 NRO/CIA							
			1971-076B	OPS 7681	EHH B21	S05469 USAF/NSA							
1971-077	1971 Sep 14	1300?	1971-077A	Kosmos-438	Zenit-4MK	S05475 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1971-078	1971 Sep 21	1200?	1971-078A	Kosmos-439	Zenit-2M	S05478 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1971-079	1971 Sep 24	1030:00	1971-079A	Kosmos-440	DS-P1-I No. 10	S05480 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1971-080	1971 Sep 28	0400	1971-080A	Shinsei	MS-F2	S05485 ISAS	Mu-4S	M-4S-3	KASC	M		JCM	
1971-081	1971 Sep 28	0740?	1971-081A	Kosmos-441	Zenit-4M	S05486 MOM	Voskhod 11A57	-	NIIP-5	-		RAEX	
1971-082	1971 Sep 28	1000:22	1971-082A	Luna-19	E-8LS No. 202	S05488 MOM	Proton-K/D	257-01	NIIP-5	LC81/24		NK9810-25	
1971-083	1971 Sep 29	0945:00	1971-083A	OSO 7	OSO H	S05491 NASA GSFC	Thor Delta N	565/D85	CC	LC17A		KHR-1	
			1971-083B	TETR 3	TETR D	S05492 NASA GSFC							
1971-084	1971 Sep 29	1130?	1971-084A	Kosmos-442	Zenit-4M	S05493 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1971-085	1971 Oct 7	1230?	1971-085A	Kosmos-443	Zenit-2M	S05536 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
			1971-085F	Nauka	Nauka	S05562 MOM							
1971-086	1971 Oct 13	1341?	1971-086A	Kosmos-444	Strela-1M	S05547 MO SSSR	Kosmos 11K65M	47114-104	NIIP-53	LC132/2		RAEX	
			1971-086B	Kosmos-445	Strela-1M	S05548 MO SSSR							
			1971-086C	Kosmos-446	Strela-1M	S05549 MO SSSR							
			1971-086D	Kosmos-447	Strela-1M	S05550 MO SSSR							
			1971-086E	Kosmos-448	Strela-1M	S05551 MO SSSR							
			1971-086F	Kosmos-449	Strela-1M	S05552 MO SSSR							
			1971-086G	Kosmos-450	Strela-1M	S05553 MO SSSR							
			1971-086H	Kosmos-451	Strela-1M	S05554 MO SSSR							
1971-087	1971 Oct 14	0751:17	1971-087A	DMSP 4527	DMSP 5B F-1 (SV-2)	S05557 USAF	Thor Burner 2A	159	V	SLC10W		SAC7383	
1971-088	1971 Oct 14	0900?	1971-088A	Kosmos-452	Zenit-4M	S05558 MOM	Voskhod 11A57	-	NIIP-5	-		RAEX	
1971-089	1971 Oct 17	1336	1971-089A	P71-2	ASTEX P71-2	S05560 USAF STP	Thorad SLV-2G Agena D	570	V	SLC1W		JCM	
1971-090	1971 Oct 19	1240:01	1971-090A	Kosmos-453	DS-P1-Yu No. 44	S05563 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1971-091	1971 Oct 21	1132:00	1971-091	ITOS B	ITOS B	A05005 NOAA	Thor Delta N6	572/D86	V	SLC2E		TR-1022	
1971-092	1971 Oct 23	1716?	1971-092A	OPS 7616	KH8-33 GAMBIT	S05575 NRO/USAF	Titan 24B	3B-33 (24B-2)	V	SLC4W		RAE	
			1971-092	SRV-1	SRV-1	A01572 NRO/USAF							
			1971-092B	SRV-2	SRV-2	S05606 NRO/USAF							
1971-093	1971 Oct 28	0409	1971-093A	Prospero	X-3	S05580 RAE	Black Arrow	R-3	WOO	LA5B		Morton	
1971-094	1971 Nov 2	1425?	1971-094A	Kosmos-454	Zenit-4M	S05585 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1971-095	1971 Nov 3	0309:06	1971-095A	DSCS II F-1	DSCS II A-1	S05587 USAF	Titan IIIC	23C-3 (3C-21)	CC	LC40		PH960801	
			1971-095B	DSCS II F-2	DSCS II A-2	S05588 USAF							
1971-F10	1971 Nov 5	1300	1971-F10	STV 4	STV 4	F00636 ELDO	Europa II	F-11	CSG	CECLES		Rothmund	
1971-096	1971 Nov 15	0552	1971-096A	SSS 1	SSS A	S05598 NASA GSFC	Scout B	S163CR	SMLC			LAAFB	
1971-097	1971 Nov 17	1109:48	1971-097A	Kosmos-455	DS-P1-Yu No. 54	S05608 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1971-098	1971 Nov 19	1200?	1971-098A	Kosmos-456	Zenit-4M	S05611 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1971-099	1971 Nov 20	1800?	1971-099A	Kosmos-457	Sfera	S05614 MO SSSR	Kosmos 11K65M	47114-106	NIIP-53	LC132/2		RAEX	
1971-100	1971 Nov 24	0930?	1971-100A	Molniya-2	Molniya-2	S05620 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1971-101	1971 Nov 29	1009:56	1971-101A	Kosmos-458	DS-P1-Yu No. 53	S05623 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1971-102	1971 Nov 29	1730:00	1971-102A	Kosmos-459	DS-P1-M No. 5	S05625 MO SSSR	Kosmos 11K65M	65027-110	NIIP-53	LC132/1		AVMDS	
1971-103	1971 Nov 30	1639?	1971-103A	Kosmos-460	Tselina-O	S05628 MO SSSR	Kosmos 11K65M	65017-101	NIIP-53	LC132/2		RAEX	
1971-104	1971 Dec 2	0825:14	1971-104A	Interkosmos-5	DS-U2-1K No. 2	S05641 IK	Kosmos 11K63	-	GTSP-4	LC86/4		AVMDS	
1971-105	1971 Dec 2	1730:01	1971-105A	Kosmos-461	DS-U2-MT No. 1	S05643 MO SSSR	Kosmos 11K65M	47119-109	NIIP-53	LC132/1		AVMDS	
1971-F12	1971 Dec 3		1971-F12	[Kosmos]	Zenit-2M	F00638 MOM	Voskhod 11A57	-	NIIP-53	-		AVMNLJ	
			1971-F12	[Nauka]	Nauka	F00640 MOM							
1971-106	1971 Dec 3	1319?	1971-106A	Kosmos-462	I2P	S05646 PKO	Tsiklon-2	-	NIIP-5	-		RAEX	
1971-F13	1971 Dec 4	2230	1971-F13	AFP-827	CANYON 4	F00642 USAF/NSA	SLV-3A Agena D	5503A	CC	LC13		AFMTC	
1971-F14	1971 Dec 5	1620	1971-F14	D-2A Polaire	D-2A Polaire	F00644 CNES	Diamant B	No. 4	CSG	Diamant		JCM	
1971-107	1971 Dec 6	0950?	1971-107A	Kosmos-463	Zenit-4M	S05661 MOM	Voskhod 11A57	-	NIIP-5	-		RAEX	
1971-108	1971 Dec 10	1100?	1971-108A	Kosmos-464	Zenit-4M	S05670 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1971-109	1971 Dec 11	2047:01	1971-109A	Ariel 4	UK 4	S05675 UK SRC	Scout B-1	S183C	V	SLC5		VCR	
1971-110	1971 Dec 14	1213	1971-110A	OPS 7898 P/L 1	NRL PL171	S05678 NRL	Thorad SLV-2G Agena D	568	V	SLC1W		JCM	
			1971-110C	OPS 7898 P/L 2	NRL PL172	S05680 NRL							
			1971-110D	OPS 7898 P/L 3	NRL PL173	S05681 NRL							
			1971-110E	OPS 7898 P/L 4	NRL PL174	S05682 NRL							
1971-111	1971 Dec 15	0431?	1971-111A	Kosmos-465	Tsiklon	S05683 MO SSSR	Kosmos 11K65M	65017-108	NIIP-53	LC132/2		RAEX	
1971-112	1971 Dec 16	0939?	1971-112A	Kosmos-466	Zenit-4M	S05687 MOM	Voskhod 11A57	-	NIIP-5	-		RAEX	
1971-113	1971 Dec 17	1039:58	1971-113A	Kosmos-467	DS-P1-Yu No. 45	S05704 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1971-114	1971 Dec 17	1300?	1971-114A	Kosmos-468	Strela-2	S05705 MO SSSR	Kosmos 11K65M	65014-102	NIIP-53	LC132/2		RAEX	
1971-115	1971 Dec 19	2250?	1971-115A	Molniya-1	Molniya-1	S05712 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1971-116	1971 Dec 20	0110:04	1971-116A	Intelsat IV F3	Intelsat IV F3	S05709 Intelsat	SLV-3C Centaur	AC-26	CC	LC36A		TR-1022	
1971-117	1971 Dec 25	1130?	1971-117B	Kosmos-469	US-A	S05737 MO SSSR	Tsiklon-2	-	NIIP-5	-		RAEX	



1971-118	1971 Dec 27 1404?	1971-118A	Kosmos-470	Zenit-4MT	S05727 MOM	Soyuz 11A511M	-	NIIIP-53	-	RAEX
1971-119	1971 Dec 27 1900:00	1971-119A	Aureole 1	DS-U2-GKA No. 1	S05729 MO SSSR/CNES	Kosmos 11K65M	65014-103	NIIIP-53	LC132/2	AVMDS
1971-120	1971 Dec 29 1050:01	1971-120A	Meteor	Meteor-MV	S05731 MOM	Vostok 8A92M	-	NIIIP-53	-	PL-WWW
1972-001	1972 Jan 12 0959?	1972-001A	Kosmos-471	Zenit-4M	S05764 MOM	Voskhod 11A57	-	NIIIP-5	-	RAEX
1972-002	1972 Jan 20 1836	1972-002A	OPS 1737	KH9-2 HEXAGON	S05769 NRO/CIA	Titan IIID	23D-2	V	SLC4E	JCM
		1972-002D	OPS 7719	SS B 22	S05772 USAF/NSA					
		1972-002	SRV-1	SRV-1	A01591 NRO					
		1972-002	SRV-2	SRV-2	A01593 NRO					
		1972-002	SRV-3	SRV-3	A01595 NRO					
		1972-002	SRV-4	SRV-4	A01597 NRO					
1972-003	1972 Jan 23 0012:04	1972-003A	Intelsat IV F4	Intelsat IV F4	S05775 Intelsat	SLV-3C Centaur	AC-28	CC	LC36B	TR-1022
1972-004	1972 Jan 25 1115:01	1972-004A	Kosmos-472	DS-P1-Yu No. 52	S05804 MO SSSR	Kosmos 11K63	-	NIIIP-53	LC133/1	AVMDS
1972-005	1972 Jan 31 1720:02	1972-005A	HEOS 2	HEOS A2	S05814 ESRO	Thor Delta L	564/D87	V	SLC2E	TR-1022
1972-006	1972 Feb 3 0840?	1972-006A	Kosmos-473	Zenit-2M	S05821 MOM	Voskhod 11A57	-	NIIIP-5	-	RAEX
1972-007	1972 Feb 14 0327:59	1972-007A	Luna-20 VA	VA	S05835 MOM	Proton-K/D	258-01	NIIIP-5	LC81/24	NK9810-25
		1972-007E	Luna-20 KT	E-8-5 No. 408	S05841 MOM					
1972-008	1972 Feb 16 0930?	1972-008A	Kosmos-474	Zenit-4M	S05839 MOM	Voskhod 11A57	-	NIIIP-5	-	RAEX
1972-F01	1972 Feb 16 0959	1972-F01	OPS 1844	Jumpseat 2	F00646 USAF/NSA	Titan 33B	3B-37 (33B-2?)	V	SLC4W	JCM
1972-U01	1972 Feb 22 2258	-	Luna-20 VA	E-8-5 VA No. 408	MOM	E-8-5 VA	No. 408	APC	KT-408	JCM
1972-009	1972 Feb 25 0752?	1972-009A	Kosmos-475	Tsiklon	S05846 MO SSSR	Kosmos 11K65M	53727-113	NIIIP-53	LC132/2	RAEX
1972-010	1972 Mar 1 0939:28	1972-010A	DSP F3	DSP 4	S05851 USAF	Titan IIIC	23C-4 (3C-22)	CC	LC40	PH960801
1972-011	1972 Mar 1 1115?	1972-011A	Kosmos-476	Tselina-D	S05852 MOM	Vostok 8A92M	-	NIIIP-53	-	RAEX
1972-012	1972 Mar 3 0149:04	1972-012A	Pioneer 10	Pioneer F	S05860 NASA ARC	SLV-3C Centaur	AC-27	CC	LC36A	TR-1022
1972-013	1972 Mar 4 1000?	1972-013A	Kosmos-477	Zenit-2M	S05862 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
		1972-013E	Kapsula Kosmosa-477	Nauka	S05882 MOM					
1972-014	1972 Mar 12 0155:08	1972-014A	TD-1A	TD-1A	S05879 ESRO	Thor Delta N	573/D88	V	SLC2E	TR-1022
1972-015	1972 Mar 15 1300?	1972-015A	Kosmos-478	Zenit-4M	S05885 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
1972-016	1972 Mar 17 1700	1972-016A	OPS 1678	KH8-34 GAMBIT	S05888 NRO/USAF	Titan 24B	3B-34 (24B-3?)	V	SLC4W	JCM
		1972-016	SRV-1	SRV-1	A01627 NRO/USAF					
		1972-016	SRV-2	SRV-2	A01629 NRO/USAF					
1972-017	1972 Mar 22 2030?	1972-017A	Kosmos-479	Tselina-0	S05894 MO SSSR	Kosmos 11K65M	47127-122	NIIIP-53	LC132/2	RAEX
1972-018	1972 Mar 24 0846:12	1972-018A	DMSF 5528	DMSF 5B F-2 (SV-1)	S05903 USAF	Thor Burner 2A	153	V	SLC10W	SAC7383
1972-019	1972 Mar 25 0220?	1972-019A	Kosmos-480	Sfera	S05905 MO SSSR	Kosmos 11K65M	-	NIIIP-53	-	RAEX
1972-020	1972 Mar 25 1039:59	1972-020A	Kosmos-481	DS-P1-Yu No. 46	S05906 MO SSSR	Kosmos 11K63	-	NIIIP-53	LC133/1	AVMDS
1972-021	1972 Mar 27 0415:01	1972-021A	SA	SA	A01631 MOM	Molniya 8K78M	-	NIIIP-5	-	NK9707-75
		1972-021A	Venera-8	4V-1 No. 670	S05912 MOM					
1972-022	1972 Mar 30 1405:01	1972-022A	Meteor	Meteor-MV	S05917 MOM	Vostok 8A92M	-	NIIIP-53	-	PL-WWW
1972-023	1972 Mar 31 0402:33	1972-023E	SA	SA	S06073 MOM	Molniya 8K78M	-	NIIIP-5	-	NK9701-29
		1972-023A	Kosmos-482	4V-1 No. 671	S05919 MOM					
1972-024	1972 Apr 3 1015?	1972-024A	Kosmos-483	Zenit-4M	S05924 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
1972-025	1972 Apr 4 2038:30	1972-025B	SRET 1	MAS/SRET	S05928 CNES	Molniya 8K78M	-	NIIIP-53	LC43/4	NK9707-75
		1972-025A	Molniya-1	Molniya-1 No. 27	S05927 MOM					
1972-026	1972 Apr 6 0800?	1972-026A	Kosmos-484	Zenit-2M	S05933 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
		1972-026C	Kapsula Kosmosa-484	Nauka	S06002 MOM					
1972-027	1972 Apr 7 1000:00	1972-027A	Interkosmos-6	Energiya No. 1	S05936 MOM	Voskhod 11A57	-	NIIIP-5	LC31	NK9521-43
1972-028	1972 Apr 11 1104:58	1972-028A	Kosmos-485	DS-P1-Yu No. 58	S05938 MO SSSR	Kosmos 11K63	-	NIIIP-53	LC133/1	AVMDS
1972-029	1972 Apr 14 0054?	1972-029A	Prognoz	SO-M No. 501	S05941 MOM	Molniya 8K78M	-	NIIIP-5	LC31	RAEX
1972-030	1972 Apr 14 0800?	1972-030A	Kosmos-486	Zenit-4M	S05945 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
1972-031	1972 Apr 16 1754	1972-031B	Saturn S-IVB-511	Saturn S-IVB-511	S06001 NASA MSFC	Saturn V	SA-511	LUT3,KSC	LC39A	KHR-1
		1972-031C	Orion	LM 11 AS	S06005 NASA MSC					
		1972-031	LM 11 DS	LM 11 DS	A01641 NASA MSC					
		1972-031	ALSEP	ALSEP	A01635 NASA MSC					
		1972-031	LRV-2	LRV-2	A01636 NASA MSC					
		1972-031A	Casper	Apollo CM-113	S06000 NASA MSC					
		1972-031D	Apollo 16 Subsatellite	Apollo 16 Subsatellite	S06009 NASA MSC					
1972-032	1972 Apr 19 2144	1972-032A	OPS 5640	CORONA 1116	S06003 NRO/CIA	Thorad SLV-2H Agena D	569	V	SLC3W	PER
		1972-032	SRV 833	SRV 1116-1	A01647 NRO/CIA					
		1972-032	SRV 834	SRV 1116-2	A01649 NRO/CIA					
1972-033	1972 Apr 21 1159:59	1972-033A	Kosmos-487	DS-P1-Yu No. 57	S06006 MO SSSR	Kosmos 11K63	-	NIIIP-53	LC133/1	AVMDS
1972-U02	1972 Apr 24 0125:48	-	Orion	LM 11 Ascent Stage	NASA MSC	LM AS	11	DES	LM11-DS	ApolloMR
1972-F02	1972 Apr 25 1129:59	1972-F02	Kosmos	DS-P1-Yu No. 51	F00649 MO SSSR	Kosmos 11K63	-	NIIIP-53	LC133/1	AVMDS
1972-034	1972 May 5 1120?	1972-034A	Kosmos-488	Zenit-4MK	S06016 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
1972-035	1972 May 6 1124?	1972-035A	Kosmos-489	Tsiklon	S06019 MO SSSR	Kosmos 11K65M	-	NIIIP-53	-	RAEX
1972-036	1972 May 17 1019?	1972-036A	Kosmos-490	Zenit-2M	S06021 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
		1972-036D	Kapsula Kosmosa-490	Nauka	S06040 MOM					
1972-037	1972 May 19 1430?	1972-037A	Molniya-2	Molniya-2	S06031 MOM	Molniya 8K78M	-	NIIIP-53	-	RAEX
1972-F03	1972 May 20 1530	1972-F03	OPS 6574	KH8-35 GAMBIT	F00651 NRO/USAF	Titan 24B	3B-35 (24B-4?)	V	SLC4W	JCM
		1972-F03	SRV-1	SRV-1	F00653 NRO/USAF					
		1972-F03	SRV-2	SRV-2	F00655 NRO/USAF					
1972-038	1972 May 25 0635?	1972-038A	Kosmos-491	Zenit-4M	S06035 MOM	Voskhod 11A57	-	NIIIP-5	-	RAEX
1972-039	1972 May 25 1841	1972-039A	OPS 6371	CORONA 1117	S06037 NRO/CIA	Thorad SLV-2H Agena D	571	V	SLC3W	JCM
		1972-039	SRV 815R	SRV 1117-1	A01654 NRO/CIA					
		1972-039	SRV 816R	SRV 1117-2	A01657 NRO/CIA					
1972-040	1972 Jun 9 0659?	1972-040A	Kosmos-492	Zenit-4M	S06049 MOM	Voskhod 11A57	-	NIIIP-5	-	RAEX
1972-041	1972 Jun 13 2153:04	1972-041A	Intelsat IV F5	Intelsat IV F5	S06052 Intelsat	SLV-3C Centaur	AC-29	CC	LC36B	TR-1022
1972-042	1972 Jun 21 0625?	1972-042A	Kosmos-493	Zenit-2M	S06053 MOM	Voskhod 11A57	-	NIIIP-5	-	RAEX
1972-043	1972 Jun 23 0924?	1972-043A	Kosmos-494	Strela-2	S06059 MO SSSR	Kosmos 11K65M	-	NIIIP-53	LC132/2	RAEX
1972-044	1972 Jun 23 1119?	1972-044A	Kosmos-495	Zenit-4M	S06060 MOM	Voskhod 11A57	-	NIIIP-53	-	RAEX
1972-045	1972 Jun 26 1453?	1972-045A	Kosmos-496	Soyuz 7K-T No. 33L	S06066 MOM	Soyuz 11A511	-	NIIIP-5	-	RAEX
1972-046	1972 Jun 29 0347:35	1972-046A	Prognoz-2	SO-M	S06068 MOM	Molniya 8K78M	-	NIIIP-5	LC31	JCM
1972-047	1972 Jun 30 0558:41	1972-047A	Interkosmos-7	DS-U3-IK No. 3	S06075 IK	Kosmos 11K63	-	GTSP-4	LC86/4	AVMDS
1972-048	1972 Jun 30 0919:49	1972-048A	Kosmos-497	DS-P1-I No. 12	S06076 MO SSSR	Kosmos 11K63	-	NIIIP-53	LC133/1	AVMDS

1972-049	1972 Jun 30 1852:01	1972-049A	Meteor	Meteor-MV	S06079 MOM	Vostok 8A92M	-	NIIP-53	-	PL-www
1972-050	1972 Jul 5 0929:58	1972-050A	Kosmos-498	DS-P1-Yu No. 56	S06086 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1972-051	1972 Jul 6 1040?	1972-051A	Kosmos-499	Zenit-4M	S06090 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1972-052	1972 Jul 7 1746	1972-052A	OPS 7293	KH9-3 HEXAGON	S06094 NRO/CIA	Titan IIID	23D-5	V	SLC4E	JCM
		1972-052C	OPS 7803	SS B 23	S06096 USAF/NSA					
		1972-052	SRV-1	SRV-1	A01599 NRO					
		1972-052	SRV-2	SRV-2	A01601 NRO					
		1972-052	SRV-3	SRV-3	A01603 NRO					
		1972-052	SRV-4	SRV-4	A01605 NRO					
1972-053	1972 Jul 10 1615?	1972-053A	Kosmos-500	Tselina-O	S06097 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/2	RAEX
1972-054	1972 Jul 12 0559:57	1972-054A	Kosmos-501	DS-P1-Yu No. 50	S06099 MO SSSR	Kosmos 11K63	-	GTsP-4	LC86/4	AVMDS
1972-055	1972 Jul 13 1430?	1972-055A	Kosmos-502	Orion	S06105 MOM	Soyuz 11A511M	-	NIIP-53	-	RAEX
1972-056	1972 Jul 19 1345?	1972-056A	Kosmos-503	Zenit-4M	S06114 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1972-057	1972 Jul 20 1810?	1972-057A	Kosmos-504	Strela-1M	S06117 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/2	RAEX
		1972-057B	Kosmos-505	Strela-1M	S06118 MO SSSR					
		1972-057C	Kosmos-506	Strela-1M	S06119 MO SSSR					
		1972-057D	Kosmos-507	Strela-1M	S06120 MO SSSR					
		1972-057E	Kosmos-508	Strela-1M	S06121 MO SSSR					
		1972-057F	Kosmos-509	Strela-1M	S06122 MO SSSR					
		1972-057G	Kosmos-510	Strela-1M	S06123 MO SSSR					
		1972-057H	Kosmos-511	Strela-1M	S06124 MO SSSR					
1972-058 01	1972 Jul 23 1806:06	1972-058A	ERTS 1	ERTS A	S06126 NASA GSFC	Delta 0900	574/D89	V	SLC2W	MOR E-641-72-
1972-059	1972 Jul 28 1019?	1972-059A	Kosmos-512	Zenit-2M	S06130 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1972-F04	1972 Jul 29 0320:57	1972-F04	[Salyut-2]	DOS 2 (17K No. 122)	F00657 MOM	Proton-K	260-01	NIIP-5	LC81/23	NK9810-25
1972-060	1972 Aug 2 0815?	1972-060A	Kosmos-513	Zenit-4M	S06135 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1972-061	1972 Aug 13 1510	1972-061A	Explorer 46	Meteoroid Technology Sat	S06142 NASA LaRC	Scout D-1	S184C	WI	LA3A	LAAFB
1972-062	1972 Aug 16 1340?	1972-062A	Kosmos-514	Tsiklon GVM	S06148 MO SSSR	Kosmos 11K65M	Yu149-38	NIIP-53	LC132/2	RAEX
1972-063	1972 Aug 18 1000?	1972-063A	Kosmos-515	Zenit-4MK	S06150 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1972-064	1972 Aug 19 0240	1972-064A	Denpa	REXS	S06152 ISAS	Mu-4S	M-4S-4	KASC	M	SP-4017
1972-065	1972 Aug 21 1028:02	1972-065A	QAO-3 Copernicus	QAO-C	S06153 NASA GSFC	SLV-3C Centaur	AC-22	CC	LC36B	TR-1022
1972-066	1972 Aug 21 1036?	1972-066C	Kosmos-516	US-A	S06199 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1972-067	1972 Aug 30 0819?	1972-067A	Kosmos-517	Zenit-2M	S06168 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1972-068	1972 Sep 1 1744?	1972-068A	OPS 8888	KH8-36 GAMBIT	S06172 NRO/USAF	Titan 24B	3B-39 (24B-5?)	V	SLC4W	RAE
		1972-068	SRV-1	SRV-1	A01679 NRO/USAF					
		1972-068	SRV-2	SRV-2	A01681 NRO/USAF					
1972-F05	1972 Sep 2	1972-F05	[Kosmos]	Zenit-4M	F00659 MOM	Voskhod 11A57	-	NIIP-53	-	AVMNLJ
1972-069	1972 Sep 2 1750:29	1972-069A	Triad OI-1X	Triad OI-1X	S06173 USN	Scout B-1	S182C	V	SLC5	VCR
1972-070	1972 Sep 15 0940?	1972-070A	Kosmos-518	Zenit-2M	S06186 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1972-070C	Kapsula Kosmosa-518	Nauka	S06198 MOM					
1972-071	1972 Sep 16 0820?	1972-071A	Kosmos-519	Zenit-4M	S06188 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1972-072	1972 Sep 19 1919:03	1972-072A	Kosmos-520	Oko	S06192 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1972-073	1972 Sep 23 0120:00	1972-073A	IMP 7	IMP H	S06197 NASA GSFC	Delta 1604	579/D90	CC	LC17B	TR-1022
1972-074	1972 Sep 29 2018:59	1972-074A	Kosmos-521	DS-P1-M No. 4	S06206 MO SSSR	Kosmos 11K65M	Yu47121-11	NIIP-53	LC132/2	AVMDS
1972-075	1972 Sep 30 2019?	1972-075A	Molniya-2	Molniya-2	S06208 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1972-076	1972 Oct 2 2009?	1972-076B	P72-1	P72-1	S06217 USAF	Atlas Burner 2A	102F	V	BMRSA1	RAE
		1972-076A	Radcat	Radcat	S06212 USA					
1972-077	1972 Oct 4 1200?	1972-077A	Kosmos-522	Zenit-4M	S06219 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1972-078	1972 Oct 5 1130:00	1972-078A	Kosmos-523	DS-P1-Yu No. 63	S06222 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1972-079	1972 Oct 10 1803	1972-079A	OPS 8314	KH9-4 HEXAGON	S06227 NRO/CIA	Titan IIID	23D-3	V	SLC4E	JCM
		1972-079C	OPS 8314/2	SS C 3	S06822 USAF/NSA					
		1972-079	SRV-1	SRV-1	A01607 NRO					
		1972-079	SRV-2	SRV-2	A01609 NRO					
		1972-079	SRV-3	SRV-3	A01611 NRO					
		1972-079	SRV-4	SRV-4	A01613 NRO					
1972-080	1972 Oct 11 1319:58	1972-080A	Kosmos-524	DS-P1-Yu No. 49	S06229 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1972-081	1972 Oct 14 0616?	1972-081A	Molniya-1	Molniya-1	S06231 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1972-082	1972 Oct 15 1719:19	1972-082A	NOAA 2	ITOS D	S06235 NOAA	Delta 0300	575/D91	V	SLC2W	TR-1022
		1972-082B	Amsat-Oscar-6	Oscar 6	S06236 AMSAT-NA					
1972-F06	1972 Oct 17	1972-F06	Kosmos	Strela-2	F00663 MO SSSR	Kosmos 11K65M	Yu149-40	NIIP-53	LC132/1	AVMNLJ
1972-083	1972 Oct 18 1159?	1972-083A	Kosmos-525	Zenit-2M	S06248 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1972-083C	Kapsula Kosmosa-525	Nauka 16KS No. 1L	S06258 MOM					
1972-084	1972 Oct 25 1039:57	1972-084A	Kosmos-526	DS-P1-Yu No. 61	S06254 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1972-085	1972 Oct 26 2205:01	1972-085A	Meteor	Meteor-MV	S06256 MOM	Vostok 8A92M	-	NIIP-53	-	PL-www
1972-086	1972 Oct 31 1329?	1972-086A	Kosmos-527	Zenit-4MK	S06260 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1972-087	1972 Nov 1 0208?	1972-087A	Kosmos-528	Strela-1M	S06262 MO SSSR	Kosmos 11K65M	Yu149-46	NIIP-53	LC132/2	RAEX
		1972-087B	Kosmos-529	Strela-1M	S06264 MO SSSR					
		1972-087C	Kosmos-530	Strela-1M	S06265 MO SSSR					
		1972-087D	Kosmos-531	Strela-1M	S06266 MO SSSR					
		1972-087E	Kosmos-532	Strela-1M	S06267 MO SSSR					
		1972-087F	Kosmos-533	Strela-1M	S06268 MO SSSR					
		1972-087G	Kosmos-534	Strela-1M	S06269 MO SSSR					
		1972-087H	Kosmos-535	Strela-1M	S06270 MO SSSR					
1972-088	1972 Nov 3 0134?	1972-088A	Kosmos-536	Tselina-O	S06272 MO SSSR	Kosmos 11K65M	Yu47121-1U	NIIP-53	LC132/1?	RAEX
1972-089	1972 Nov 9 0323:46	1972-089A	DMSP 6530	DMSP 5B F-3	S06275 USAF	Thor Burner 2A	294	V	SLC10W	SAC7383
1972-090	1972 Nov 10 0114:03	1972-090A	Anik A1	Anik A1	S06278 Telesat	Delta 1914	580/D92	CC	LC17B	TR-1022
1972-091	1972 Nov 15 2213:46	1972-091A	SAS 2	SAS B	S06282 NASA GSFC	Scout D-1	S170CR	SMLC	LC17B	LAAFB
1972-092	1972 Nov 22 0017:01	1972-092A	ESRO 4	ESRO 4	S06285 ESRO	Scout D-1	S185C	V	SLC5	VCR
1972-F07	1972 Nov 23 0611:55	1972-F07	Mockup LK	Mockup LK	F00668 MOM	N-1 11A52	7L	NIIP-5	LC110L	JCM
		1972-F07	LOK	LOK	F00670 MOM					
1972-093	1972 Nov 25 0910?	1972-093A	Kosmos-537	Zenit-2M	S06287 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1972-094	1972 Nov 30 2149:57	1972-094A	Interkosmos-8	DS-U1-IK No. 2	S06291 IK	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS

1972-095	1972 Dec 2	0439?	1972-095A	Molniya-1	Molniya-1	S06294 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1972-096	1972 Dec 7	0533	1972-096B	Saturn S-IVB-512	Saturn S-IVB-512	S06301 NASA MSFC	Saturn V	SA-512	LUT3,KSC	LC39A	KHR-1
			1972-096C	Challenger	LM 12 AS	S06307 NASA MSC					
			1972-096	ALSEP	ALSEP	A01694 NASA MSC					
			1972-096	LM 12	LM 12 DS	A01698 NASA MSC					
			1972-096	LRV-3	LRV-3	A01695 NASA MSC					
			1972-096A	America	Apollo CM-114	S06300 NASA MSC					
1972-097	1972 Dec 11	0756:00	1972-097A	Nimbus 5	Nimbus E	S06305 NASA GSFC	Delta 0900	577/D93	V	SLC2W	TR-1022
1972-098	1972 Dec 12	0651?	1972-098A	Molniya-2	Molniya-2	S06308 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1972-099	1972 Dec 14	1340?	1972-099A	Kosmos-538	Zenit-4M	S06311 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1972-U03	1972 Dec 14	2254:37	-	Challenger	LM 12 Ascent Stage	NASA MSC	LM AS	12	LIT	LM12-DS	ApollomR
1972-100	1972 Dec 16	1124:56	1972-100A	Aeros 1	GRS-B	S06315 DFVLR	Scout D-1	S181C	V	SLC5	VCR
1972-101	1972 Dec 20	2220	1972-101A	AFP-827	CANYON 5	S06317 USAF/MSA	SLV-3A Agena D	5204A	CC	LC13	ETR-IDX-FY73
1972-102	1972 Dec 21	0205?	1972-102A	Kosmos-539	Sfera	S06319 MO SSSR	Kosmos 11K65M	Yu149-43	NIIP-53	LC132/2	RAEX
1972-103	1972 Dec 21	1745	1972-103A	OPS 3978	KH8-37 GAMBIT	S06321 NRO/USAF	Titan 24B	3B-40 (24B-6)	V	SLC4W	LR721221
			1972-103	SRV-1	SRV-1	A01703 NRO/USAF					
			1972-103	SRV-2	SRV-2	A01705 NRO/USAF					
1972-104	1972 Dec 25	2305?	1972-104A	Kosmos-540	Strela-2	S06323 MO SSSR	Kosmos 11K65M	53724-113	NIIP-53	LC132/2	RAEX
1972-105	1972 Dec 27	1030?	1972-105A	Kosmos-541	Orion	S06326 MOM	Soyuz 11A511M	-	NIIP-53	-	RAEX
1972-106	1972 Dec 28	1100?	1972-106A	Kosmos-542	Tselina-D	S06328 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1973-001	1973 Jan 8	0655:38	1973-001	Lunokhod-2	8EL No. 204	A01707 MOM	Proton-K/D	259-01	NIIP-5	LC81/23	NK9524-70
			1973-001A	Luna-21	E-8 No. 204	S06333 MOM					
1973-002	1973 Jan 11	1000?	1973-002A	Kosmos-543	Zenit-4M	S06339 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1973-003	1973 Jan 20	0336?	1973-003A	Kosmos-544	Tselina-O	S06343 MO SSSR	Kosmos 11K65M	Yu149-44	NIIP-53	LC132/1	RAEX
1973-004	1973 Jan 24	1144:50	1973-004A	Kosmos-545	DS-P1-Yu No. 62	S06348 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1973-005	1973 Jan 26	1144?	1973-005A	Kosmos-546	Tsiklon GVM	S06350 MO SSSR	Kosmos 11K65M	Yu149-37	GTsP-4	LC107/1	RAEX
1973-006	1973 Feb 1	0830?	1973-006A	Kosmos-547	Zenit-2M	S06353 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1973-007	1973 Feb 3	0548?	1973-007A	Molniya-1	Molniya-1	S06356 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1973-008	1973 Feb 8	1315?	1973-008A	Kosmos-548	Zenit-4M	S06359 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1973-009	1973 Feb 15	0111?	1973-009A	Prognoz-3	SO-M	S06364 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAEX
1973-010	1973 Feb 28	0437?	1973-010A	Kosmos-549	Tselina-O	S06373 MO SSSR	Kosmos 11K65M	Yu149-45	NIIP-53	LC132/1	RAEX
1973-011	1973 Mar 1	1240?	1973-011A	Kosmos-550	Zenit-4MK	S06376 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1973-012	1973 Mar 6	0920?	1973-012A	Kosmos-551	Zenit-4M	S06378 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1973-013	1973 Mar 6	0930	1973-013A	AFP-720	RHYOLITE 2	S06380 NRO/CIA	SLV-3A Agena D	5202A	CC	LC13	ETR-IDX-FY73
1973-014	1973 Mar 9	2100	1973-014A	OPS 8410	KH9-5 HEXAGON	S06382 NRO/CIA	Titan IIID	23D-6	V	SLC4E	LR730310
			1973-014	SRV-1	SRV-1	A01712 NRO					
			1973-014	SRV-2	SRV-2	A01714 NRO					
			1973-014	SRV-3	SRV-3	A01716 NRO					
			1973-014	SRV-4	SRV-4	A01718 NRO					
1973-015	1973 Mar 20	1120:02	1973-015A	Meteor	Meteor-MV	S06392 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1973-016	1973 Mar 22	1000?	1973-016A	Kosmos-552	Zenit-2M	S06394 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
			1973-016C	Kapsula Kosmosa-552	Nauka 16KS No. 2L	S06397 MOM					
1973-017	1973 Apr 3	0900:00	1973-017A	Salyut-2	Almaz OPS 1	S06398 MOM	Proton-K	283-01	NIIP-5	LC81/23	NK9810-25
			1973-017	KSI	KSI	A01746 MOM					
1973-018	1973 Apr 5	1111?	1973-018A	Molniya-2	Molniya-2	S06418 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1973-019	1973 Apr 6	0211:00	1973-019A	Pioneer 11	Pioneer G	S06421 NASA ARC	SLV-3D Centaur	AC-30	CC	LC36B	TR-1022
1973-020	1973 Apr 12	1149:55	1973-020A	Kosmos-553	DS-P1-Yu No. 55	S06427 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1973-021	1973 Apr 19	0859?	1973-021A	Kosmos-554	Zenit-4MK	S06432 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1973-022	1973 Apr 19	1019:58	1973-022A	Interkosmos-9 Kopernik-500	DS-U2-1K Kopernik-500	S06433 IK	Kosmos 11K63	-	GTsP-4	LC86/4	AVMDS
1973-023	1973 Apr 20	2347:03	1973-023A	Anik A2	Anik A2	S06437 Telesat	Delta 1914	583/D94	CC	LC17B	TR-1022
1973-F01	1973 Apr 25		1973-F01	[Kosmos]	US-A	F00673 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	AVMNLJ
1973-024	1973 Apr 25	1045?	1973-024A	Kosmos-555	Zenit-2M	S06440 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
			1973-024D	Kapsula Kosmosa-555	Nauka	S06445 MOM					
1973-025	1973 May 5	0700?	1973-025A	Kosmos-556	Zenit-4MK	S06446 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1973-026	1973 May 11	0020:00	1973-026A	Kosmos-557	DOS 3	S06498 MOM	Proton-K	284-01	NIIP-5	LC81/23	NK9810-25
1973-027	1973 May 14	1730	1973-027A	Skylab Orbital Workshop	Skylab I OWS	S06633 NASA MSFC	Saturn V	SA-513	LUT2,KSC	LC39A	KHR-1
			1973-027	Skylab Airlock Module	Skylab AM	A01754 NASA MSFC					
			1973-027	Multiple Docking Adapter	Skylab MDA	A01755 NASA MSFC					
			1973-027	Apollo Telescope Mount	Skylab ATM	A01756 NASA MSFC					
1973-028	1973 May 16	1640	1973-028A	OPS 2093	KH8-38 GAMBIT	S06640 NRO/USAF	Titan 24B	3B-41 (24B-7)	V	SLC4W	LR730516
			1973-028	SRV-1	SRV-1	A01759 NRO/USAF					
			1973-028	SRV-2	SRV-2	A01761 NRO/USAF					
1973-029	1973 May 17	1319:58	1973-029A	Kosmos-558	DS-P1-Yu No. 65	S06645 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1973-030	1973 May 18	1100?	1973-030A	Kosmos-559	Zenit-4MK	S06647 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1973-F02	1973 May 21	0847	1973-F02	D-5B	D-5B	F00677 CNES	Diamant B	No. 5	CSG	Diamant	LeMonde730522
			1973-F02	D-5A	D-5A	F00678 CNES					
1973-031	1973 May 23	1030?	1973-031A	Kosmos-560	Zenit-4M	S06652 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1973-F03	1973 May 25		1973-F03	Kosmos	Tsiklon	F00680 MO SSSR	Kosmos 11K65M	65024-109	NIIP-53	LC132/1	AVMNLJ
1973-032	1973 May 25	1300	1973-032B	Saturn S-IVB-206	Saturn S-IVB-206	S06656 NASA MSFC	Saturn IB	SA-206	LUT1,KSC	LC39B	KHR-1
			1973-032A	Skylab SL-2	Apollo CM-116	S06655 NASA MSC					
			1973-032	Skylab SL-2 SM	Apollo SM-116	A01763 NASA MSC					
1973-033	1973 May 25	1330?	1973-033A	Kosmos-561	Zenit-2M	S06657 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
			1973-033D	Kapsula Kosmosa-561	Nauka	S06662 MOM					
1973-034	1973 May 29	1016:03	1973-034A	Meteor	Meteor-MV	S06659 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1973-035	1973 Jun 5	1129:47	1973-035A	Kosmos-562	DS-P1-Yu No. 66	S06665 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1973-036	1973 Jun 6	1130?	1973-036A	Kosmos-563	Zenit-4M	S06667 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1973-037	1973 Jun 8	1550?	1973-037A	Kosmos-564	Strela-1M	S06675 MO SSSR	Kosmos 11K65M	53753-210	NIIP-53	LC132/1	RAEX
			1973-037B	Kosmos-565	Strela-1M	S06676 MO SSSR					
			1973-037C	Kosmos-566	Strela-1M	S06677 MO SSSR					
			1973-037D	Kosmos-567	Strela-1M	S06678 MO SSSR					
			1973-037E	Kosmos-568	Strela-1M	S06679 MO SSSR					
			1973-037F	Kosmos-569	Strela-1M	S06680 MO SSSR					



		1973-088	SRV-3	SRV-3	A01732 NRO								
		1973-088	SRV-4	SRV-4	A01734 NRO								
1973-089	1973 Nov 14	2040?	1973-089A	Molniya-1	Molniya-1	S06932 MOM	Molniya 8K78M	-	NIIP-5	-	LC39B	RAEX	
1973-090	1973 Nov 16	1401:23	1973-090B	Saturn S-IVB-208	Saturn S-IVB-208	S06937 NASA MSFC	Saturn IB	SA-208	LUT1,KSC			MPR-SAT-FE-	
			1973-090A	Skylab SL-4	CM-118	S06936 NASA MSC							
			1973-090	Skylab SL-4 SM	SM-118	A01814 NASA MSC							
1973-091	1973 Nov 20	1229:58	1973-091A	Kosmos-608	DS-P1-Yu No. 69	S06941 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1973-092	1973 Nov 21	1000?	1973-092A	Kosmos-609	Zenit-4M	S06943 MOM	Voskhod 11A57	-	NIIP-5	-		RAEX	
1973-093	1973 Nov 27	0008?	1973-093A	Kosmos-610	Tselina-O	S06950 MO SSSR	Kosmos 11K65M	53724-114	NIIP-53	LC132/2		RAEX	
1973-094	1973 Nov 28	0929:58	1973-094A	Kosmos-611	DS-P1-Yu No. 64	S06952 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1973-095	1973 Nov 28	1143?	1973-095A	Kosmos-612	Zenit-4MK	S06953 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1973-096	1973 Nov 30	0520?	1973-096A	Kosmos-613	Soyuz 7K-T No. 34L	S06957 MOM	Soyuz 11A511	-	NIIP-5	-		RAEX	
1973-097	1973 Nov 30	1308?	1973-097A	Molniya-1	Molniya-1	S06958 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1973-098	1973 Dec 4	1500?	1973-098A	Kosmos-614	Strela-2	S06965 MO SSSR	Kosmos 11K65M	53753-211	NIIP-53	LC132/2		RAEX	
1973-099	1973 Dec 13	1110:03	1973-099A	Kosmos-615	DS-P1-I No. 13	S06971 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1973-100	1973 Dec 13	2357:01	1973-100A	DSCS II F-3	DSCS II B-3	S06973 USAF	Titan IIIC	23C-8 (3C-26)	CC	LC40		PH960801	
			1973-100B	DSCS II F-4	DSCS II B-4	S06974 USAF							
1973-101	1973 Dec 16	0618:00	1973-101A	AE-C	AE-C	S06977 NASA GSFC	Delta 1900	585/D99	V	SLC2W		TR-1022	
1973-102	1973 Dec 17	1200?	1973-102A	Kosmos-616	Orion	S06979 MOM	Soyuz 11A511M	-	NIIP-53	-		RAEX	
1973-103	1973 Dec 18	1155:00	1973-103A	Soyuz-13	Soyuz 7K-T No. 33A	S06982 MOM	Soyuz 11A511	-	NIIP-5	-		JCM	
1973-104	1973 Dec 19	0943?	1973-104A	Kosmos-617	Strela-1M	S06985 MO SSSR	Kosmos 11K65M	53724-112	NIIP-53	LC132/2		RAEX	
			1973-104B	Kosmos-618	Strela-1M	S06986 MO SSSR							
			1973-104C	Kosmos-619	Strela-1M	S06987 MO SSSR							
			1973-104D	Kosmos-620	Strela-1M	S06988 MO SSSR							
			1973-104E	Kosmos-621	Strela-1M	S06989 MO SSSR							
			1973-104F	Kosmos-622	Strela-1M	S06990 MO SSSR							
			1973-104G	Kosmos-623	Strela-1M	S06991 MO SSSR							
			1973-104H	Kosmos-624	Strela-1M	S06992 MO SSSR							
1973-105	1973 Dec 21	1230?	1973-105A	Kosmos-625	Zenit-4MK	S06995 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1973-106	1973 Dec 25	1117?	1973-106A	Molniya-2	Molniya-2	S07000 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1973-107	1973 Dec 26	1630:01	1973-107A	Aureole 2	DS-U2-GKA No. 2	S07003 MO SSSR/CNES	Kosmos 11K65M	65024-111	NIIP-53	LC132/2		AVMDS	
1973-108	1973 Dec 27	2019?	1973-108D	Kosmos-626	US-A	S07115 MO SSSR	Tsiklon-2	-	NIIP-5	-		RAEX	
1973-109	1973 Dec 29	0412?	1973-109A	Kosmos-627	Tsiklon	S07008 MO SSSR	Kosmos 11K65M	65033-204	NIIP-53	LC132/2		RAEX	
1974-001	1974 Jan 17	1007?	1974-001A	Kosmos-628	Tsiklon	S07094 MO SSSR	Kosmos 11K65M	53753-208	NIIP-53	LC132/2		RAEX	
1974-002	1974 Jan 19	0138:47	1974-002A	Skyнет IIA	Skyнет IIA	S07096 UK MoD	Delta 2313	587/D100	CC	LC17B		TR-1022	
1974-003	1974 Jan 24	1500?	1974-003A	Kosmos-629	Zenit-2M	S07100 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
			1974-003	Kapsula Kosmosa-629	FEU-170-13 No. 2L	A01847 MOM							
1974-004	1974 Jan 30	1100?	1974-004A	Kosmos-630	Zenit-4MK	S07104 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1974-005	1974 Feb 6	0034?	1974-005A	Kosmos-631	Tselina-O	S07109 MO SSSR	Kosmos 11K65M	65053-209	NIIP-53	LC132/2		RAEX	
1974-F01	1974 Feb 11	1348:02	1974-F01	Viking Dynamic Simulator	VDS	F00697 NASA LaRC?	Titan IIIE	23E-1	CC	LC41		TR-1022	
			1974-F01	Sphinx	Sphinx	F00698 NASA LeRC							
1974-006	1974 Feb 12	0856?	1974-006A	Kosmos-632	Zenit-4MK	S07117 MOM	Voskhod 11A57	-	NIIP-5	-		RAEX	
1974-007	1974 Feb 13	1800?	1974-007A	OPS 6889	KH8-41 GAMBIT	S07121 NRO/USAF	Titan 24B	3B-44 (24B-10)	V	SLC4W		RAE	
			1974-007	SRV-1	SRV-1	A01851 NRO/USAF							
			1974-007	SRV-2	SRV-2	A01853 NRO/USAF							
1974-008	1974 Feb 16	0500	1974-008A	Tansei-2	MS-T2	S07122 ISAS	Mu-3C	M-3C-1	KASC	M		JCM	
1974-009	1974 Feb 18	1005:28	1974-009A	San Marco 4	San Marco C2	S07154 CRS	Scout D-1	S190C	SMLC			LAAFB	
1974-010	1974 Feb 27	1105	1974-010A	Kosmos-633	DS-P1-Yu No. 71	S07187 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1974-011	1974 Mar 5	1138	1974-011A	Meteor	Meteor-MV	S07209 MOM	Vostok 8A92M	-	NIIP-53	-		PL-WWW	
1974-012	1974 Mar 5	1605	1974-012A	Kosmos-634	DS-P1-Yu No. 67	S07211 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1		AVMDS	
1974-013	1974 Mar 9	0222:11	1974-013A	Miranda	X-4	S07213 RAE	Scout D-1	S188C	V	SLC5		VCR	
1974-014	1974 Mar 14	1030?	1974-014A	Kosmos-635	Zenit-2M	S07216 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
			1974-014E	Kapsula Kosmosa-635	Nauka 17KS No. 1L	S07222 MOM							
1974-015	1974 Mar 16	0800:11	1974-015A	DMSP 8531	DMSF 5B F-5	S07218 USAF	Thor Burner 2A	207	V	SLC10W		SAC7383	
1974-016	1974 Mar 20	0830?	1974-016A	Kosmos-636	Zenit-4MK	S07225 MOM	Soyuz 11A511U	-	NIIP-5	-		RAEX	
1974-017	1974 Mar 26	1335:00	1974-017A	Kosmos-637	11F638 GVM	S07229 MOM	Proton-K/DM	282-01	NIIP-5	LC81/23		NK9810-25	
1974-018	1974 Apr 3	0730:00	1974-018A	Kosmos-638	Soyuz 7K-TM No. 71-EPSA	S07234 MOM	Soyuz 11A511U	-	NIIP-5	-		VSA074	
1974-019	1974 Apr 4	0830?	1974-019A	Kosmos-639	Zenit-4MK	S07240 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1974-020	1974 Apr 10	2020	1974-020A	OPS 6245	KH9-8 HEXAGON	S07242 NRO/CIA	Titan IIID	23D-9	V	SLC4E		JCM	
			1974-020C	OPS 4547	SS B 25	S07247 USAF/NSA							
			1974-020	S73-7 Cal Balloon	S73-7	A01863 USAF/ARPA							
			1974-020	SRV-1	SRV-1	A01828 NRO							
			1974-020	SRV-2	SRV-2	A01830 NRO							
			1974-020	SRV-3	SRV-3	A01832 NRO							
			1974-020	SRV-4	SRV-4	A01834 NRO							
1974-021	1974 Apr 11	1223?	1974-021A	Kosmos-640	Zenit-2M	S07245 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1974-F02	1974 Apr 12		1974-F02	[Kosmos]	Zenit-4MK	F00700 MOM	Voskhod 11A57	-	NIIP-5	-		AVMNLJ	
1974-022	1974 Apr 13	2333:03	1974-022A	Westar 1	Westar 1	S07250 WUTC	Delta 2914	588/D101	CC	LC17B		TR-1022	
1974-023	1974 Apr 20	2053?	1974-023A	Molniya-1	Molniya-1	S07260 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1974-024	1974 Apr 23	1415?	1974-024A	Kosmos-641	Strela-1M	S07265 MO SSSR	Kosmos 11K65M	65033-202	NIIP-53	LC132/2		RAEX	
			1974-024B	Kosmos-642	Strela-1M	S07266 MO SSSR							
			1974-024C	Kosmos-643	Strela-1M	S07267 MO SSSR							
			1974-024D	Kosmos-644	Strela-1M	S07268 MO SSSR							
			1974-024E	Kosmos-645	Strela-1M	S07269 MO SSSR							
			1974-024F	Kosmos-646	Strela-1M	S07270 MO SSSR							
			1974-024G	Kosmos-647	Strela-1M	S07271 MO SSSR							
			1974-024H	Kosmos-648	Strela-1M	S07272 MO SSSR							
1974-025	1974 Apr 24	1150	1974-025A	Meteor	Meteor-MV	S07274 MOM	Vostok 8A92M	-	NIIP-53	-		PL-WWW	
1974-026	1974 Apr 26	1423?	1974-026A	Molniya-2	Molniya-2	S07276 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1974-027	1974 Apr 29	1330?	1974-027A	Kosmos-649	Zenit-4MK	S07280 MOM	Voskhod 11A57	-	NIIP-53	-		RAEX	
1974-028	1974 Apr 29	1710?	1974-028A	Kosmos-650	Sfera	S07281 MO SSSR	Kosmos 11K65M	Yu47121-15	NIIP-53	LC132/2		RAEX	

1974-029	1974 May 15 0730?	1974-029C	Kosmos-651	US-A	S07388 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1974-030	1974 May 15 0830?	1974-030A	Kosmos-652	Zenit-4MK	S07292 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1974-031	1974 May 15 1230?	1974-031A	Kosmos-653	Zenit-2M	S07293 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-032	1974 May 17 0653?	1974-032D	Kosmos-654	US-A	S07397 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1974-033	1974 May 17 0931:00	1974-033A	SMS 1	SMS A	S07298 NASA GSFC	Delta 2914	590/D102	CC	LC17B	TR-1022
1974-034	1974 May 17 1100	1974-034A	Interkosmos-11	DS-U3-IK No. 4	S07299 IK	Kosmos 11K65M	53749-167	GTsP-4	LC107/1	AVMDS
1974-035	1974 May 21 0616?	1974-035A	Kosmos-655	Tselina-O	S07306 MO SSSR	Kosmos 11K65M	53719-152	NIIP-53	LC132/2	RAEX
1974-F03	1974 May 23 1217	1974-F03	[Kosmos]	Yantar'-2K No. 1	F00705 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
1974-036	1974 May 27 0725?	1974-036A	Kosmos-656	Soyuz 7K-T(A9) No. 61	S07313 MOM	Soyuz 11A511	-	NIIP-5	-	RAEX
1974-037	1974 May 29 0856:51	1974-037A	Luna-22	E-8LS No. 206	S07315 MOM	Proton-K/D	282-02	NIIP-5	LC81/24	NK9810-25
1974-038	1974 May 30 1245?	1974-038A	Kosmos-657	Zenit-4MK	S07317 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-039	1974 May 30 1300:01	1974-039A	ATS 6	ATS F	S07318 NASA GSFC	Titan IIIC	23C-9 (3C-27)	CC	LC40	PH960801
1974-040	1974 Jun 3 2309:11	1974-040A	Hawkeye 1	Injun 6	S07325 NASA LaRC	Scout E-1	S191C	V	SLC5	VCR
1974-041	1974 Jun 6 0620?	1974-041A	Kosmos-658	Zenit-2M	S07328 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1974-042	1974 Jun 6 1630	1974-042A	OPS 1776	KH8-42 GAMBIT	S07330 NRO/USAF	Titan 24B	3B-45 (24B-11)	V	SLC4W	LR740606
		1974-042	SRV-1	SRV-1	A01885 NRO/USAF					
		1974-042	SRV-2	SRV-2	A01887 NRO/USAF					
1974-043	1974 Jun 13 1230?	1974-043A	Kosmos-659	Zenit-4MK	S07334 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-044	1974 Jun 18 1300?	1974-044A	Kosmos-660	Vektor	S07337 MO SSSR	Kosmos 11K65M	53714-165	NIIP-53	LC132/2	RAEX
1974-045	1974 Jun 21 0903?	1974-045A	Kosmos-661	Tselina-O	S07339 MO SSSR	Kosmos 11K65M	65053-205	NIIP-53	LC132/2	RAEX
1974-046	1974 Jun 24 2238:00	1974-046A	Salyut-3	Almaz 2 (11F71 No. 101-2)	S07342 MOM	Proton-K	283-02	NIIP-5	LC81/23	NK9810-25
		1974-046	KSI	KSI	A01908 MOM					
1974-047	1974 Jun 26 1230	1974-047A	Kosmos-662	DS-P1-I No. 14	S07347 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1974-048	1974 Jun 27 1540?	1974-048A	Kosmos-663	Tsiklon	S07349 MO SSSR	Kosmos 11K65M	53749-160	NIIP-53	LC132/1	RAEX
1974-049	1974 Jun 29 1250?	1974-049A	Kosmos-664	Orion	S07351 MOM	Soyuz 11A511M	-	NIIP-53	-	RAEX
1974-050	1974 Jun 29 1559:58	1974-050A	Kosmos-665	Oko	S07352 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1974-051	1974 Jul 3 1851:08	1974-051A	Soyuz-14	Soyuz 7K-T(A9) No. 62	S07361 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1974-052	1974 Jul 9 1440	1974-052A	Meteor	Meteor-Priroda No. 1	S07363 MOM	Vostok 8A92M	-	NIIP-53	LC43/4	NK9817-38
1974-F04	1974 Jul 11 1059:58	1974-F04	Kosmos	DS-P1-Yu No. 68	F00709 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1974-053	1974 Jul 12 1250?	1974-053A	Kosmos-666	Zenit-4MK	S07367 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-F05	1974 Jul 14	1974-F05	JSSW 2	JSSW	F00711 MAI	Feng Bao 1	FB1-3	JQ	LA2B	Clark
1974-054	1974 Jul 14 0517	1974-054A	NTS 1	NTS 1	S07369 USAF	Atlas F/PTS	69F	V	SLC3W	JCM
1974-055	1974 Jul 16 1151:01	1974-055A	Aeros 2	Aeros B	S07371 DFVLR	Scout D-1	S186C	V	SLC5	VCR
1974-056	1974 Jul 23 0123?	1974-056A	Molniya-2	Molniya-2	S07376 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1974-057	1974 Jul 25 0700?	1974-057A	Kosmos-667	Zenit-4M	S07383 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1974-058	1974 Jul 25 1200	1974-058A	Kosmos-668	DS-P1-Yu No. 74	S07385 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1974-059	1974 Jul 26 0700?	1974-059A	Kosmos-669	Zenit-2M	S07389 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1974-059G	Kapsula Kosmosa-669	Nauka	S07404 MOM					
1974-060	1974 Jul 29 1200:00	1974-060A	Molniya-1S	Molniya-1 11F658 No. 38	S07392 MOM	Proton-K/DM	287-01	NIIP-5	LC81/24	NK9810-25
1974-061	1974 Aug 6 0002?	1974-061A	Kosmos-670	Soyuz 7K-S No. 1L	S07405 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1974-062	1974 Aug 7 1250?	1974-062A	Kosmos-671	Zenit-4MK	S07409 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-063	1974 Aug 9 0322:47	1974-063A	DMSP 9532	DMSP 5C F-1	S07411 USAF	Thor Burner 2A	275	V	SLC10W	SAC7383
1974-064	1974 Aug 12 0625?	1974-064A	Kosmos-672	Soyuz 7K-TM No. 72-EP5A	S07413 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1974-065	1974 Aug 14 1545	1974-065A	OPS 3004	KH8-43 GAMBIT	S07416 NRO/USAF	Titan 24B	3B-46 (24B-12)	V	SLC4W	JCM
		1974-065	SRV-1	SRV-1	A01899 NRO/USAF					
		1974-065	SRV-2	SRV-2	A01901 NRO/USAF					
1974-066	1974 Aug 16 0341?	1974-066A	Kosmos-673	Tselina-D	S07417 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1974-067	1974 Aug 26 1958:05	1974-067A	Soyuz-15	Soyuz 7K-T(A9) No. 63	S07421 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1974-068	1974 Aug 29 0739?	1974-068A	Kosmos-674	Zenit-4MK	S07423 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1974-069	1974 Aug 29 1455?	1974-069A	Kosmos-675	Sfera	S07424 MO SSSR	Kosmos 11K65M	53719-154	NIIP-53	LC132/2	RAEX
1974-F06	1974 Aug 30	1974-F06	[Kosmos]	Zenit-2M	F00713 MOM	Voskhod 11A57	-	NIIP-53	-	AVMNLJ
		1974-F06	[Kapsula]	FEU-170 No. 3L	F00715 MOM					
1974-070	1974 Aug 30 1407:39	1974-070A	ANS	ANS	S07427 NIVR	Scout D-1	S189C	V	SLC5	VCR
1974-071	1974 Sep 11 1740?	1974-071A	Kosmos-676	Strela-2	S07433 MO SSSR	Kosmos 11K65M	53719-151	NIIP-53	LC132/2	RAEX
1974-072	1974 Sep 19 1457?	1974-072A	Kosmos-677	Strela-1M	S07435 MO SSSR	Kosmos 11K65M	53753-206	NIIP-53	LC132/2	RAEX
		1974-072B	Kosmos-678	Strela-1M	S07436 MO SSSR					
		1974-072C	Kosmos-679	Strela-1M	S07437 MO SSSR					
		1974-072D	Kosmos-680	Strela-1M	S07438 MO SSSR					
		1974-072E	Kosmos-681	Strela-1M	S07439 MO SSSR					
		1974-072F	Kosmos-682	Strela-1M	S07440 MO SSSR					
		1974-072G	Kosmos-683	Strela-1M	S07441 MO SSSR					
		1974-072H	Kosmos-684	Strela-1M	S07442 MO SSSR					
1974-073	1974 Sep 20 0930?	1974-073A	Kosmos-685	Zenit-2M	S07445 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1974-074	1974 Sep 26 1634:56	1974-074A	Kosmos-686	DS-P1-Yu No. 72	S07447 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1974-075	1974 Oct 10 2253:00	1974-075A	Westar 2	Westar 2	S07466 WUTC	Delta 2914	589/D103	CC	LC17B	TR-1022
1974-076	1974 Oct 11 1130?	1974-076A	Kosmos-687	Vektor	S07469 MO SSSR	Kosmos 11K65M	53721-225	NIIP-53	LC132/2	RAEX
1974-077	1974 Oct 15 0747:00	1974-077A	Ariel 5	UK 5	S07471 UK SRC	Scout B-1	S187C	SMLC		LAAFB
1974-078	1974 Oct 18 1500?	1974-078A	Kosmos-688	Zenit-4MK	S07473 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-079	1974 Oct 18 2236?	1974-079A	Kosmos-689	Tsiklon	S07476 MO SSSR	Kosmos 11K65M	53753-207	NIIP-53	LC132/2	RAEX
1974-080	1974 Oct 22 1800	1974-080A	Kosmos-690	Bion No. 2	S07478 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK96-26-34
1974-081	1974 Oct 24 1239?	1974-081A	Molniya-1	Molniya-1 No. 26	S07480 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1974-082	1974 Oct 25 0930?	1974-082A	Kosmos-691	Zenit-4MK	S07483 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1974-083	1974 Oct 28 1017	1974-083A	Meteor	Meteor-MV	S07490 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1974-084	1974 Oct 28 1430:32	1974-084	Luna-23 VA	Luna-23 VA	A01914 MOM	Proton-K/D	285-01	NIIP-5	LC81/24	NK9810-25
		1974-084A	Luna-23 KT	E-8-5M No. 410	S07491 MOM					
1974-085	1974 Oct 29 1930	1974-085A	OPS 7122	KH9-9 HEXAGON	S07495 NRO/CIA	Titan IIID	23D-4	V	SLC4E	JCM
		1974-085B	OPS 6239	SS B 26	S07498 USAF/NSA					
		1974-085C	S3-1	S3-1	S07499 USAF					
		1974-085	SRV-1	SRV-1	A01836 NRO					
		1974-085	SRV-2	SRV-2	A01838 NRO					
		1974-085	SRV-3	SRV-3	A01840 NRO					
		1974-085	SRV-4	SRV-4	A01842 NRO					



1974-086	1974 Oct 31 1000	1974-086A	Interkosmos-12	DS-U2-IK No. 4	S07500 IK	Kosmos 11K65M	53721-253	NIIP-53	LC132/2	AVMDS
1974-087	1974 Nov 1 1420?	1974-087A	Kosmos-692	Zenit-2M	S07502 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-088	1974 Nov 4 1040?	1974-088A	Kapsula Kosmosa-692	FEU-170 No. 4L	A01925 MOM	-	-	NIIP-53	-	RAEX
1974-F07	1974 Nov 5	1974-F07	Kosmos-693	Orion	S07509 MOM	Soyuz 11A511M	-	NIIP-53	-	RAEX
1974-089	1974 Nov 15 1711:00	1974-089A	FSW RV	FSW	F00718 MAI	Chang Zheng 2A	CZ2-1 (3)	JQ	LA2B	Clark
1974-090	1974 Nov 16 1145?	1974-090A	FSW RV	FSW RV	F00719 MAI	-	-	-	-	-
1974-091	1974 Nov 20 1159:58	1974-091A	NOAA 4	ITOS G	S07529 NOAA	Delta 2310	592/D104	V	SLC2W	TR-1022
1974-092	1974 Nov 21 1033	1974-092A	AMSAT-Oscar-7	Oscar 7	S07530 AMSAT-NA	-	-	-	-	-
1974-093	1974 Nov 21 2343:59	1974-093A	Intasat	Intasat	S07531 INTA	-	-	-	-	-
1974-094	1974 Nov 23 0028:01	1974-094A	Kosmos-694	Zenit-4MK	S07533 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-095	1974 Nov 27 1145?	1974-095A	Kosmos-695	DS-P1-Yu No. 73	S07538 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1974-096	1974 Dec 2 0940:00	1974-096A	Molniya-3	Molniya-3 No. 11	S07540 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1974-097	1974 Dec 10 0711:02	1974-097A	Intelsat IV F8	Intelsat IV F8	S07544 Intelsat	SLV-3D Centaur	AC-32	CC	LC36B	TR-1022
1974-098	1974 Dec 13 1330	1974-098A	Skynet IIB	Skynet IIB	S07547 UK Mod	Delta 2313	591/D105	CC	LC17B	TR-1022
1974-099	1974 Dec 17 1145	1974-099A	Kosmos-696	Zenit-2M	S07551 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1974-100	1974 Dec 18 1412?	1974-100A	Soyuz-16	Soyuz 7K-TM No. 73-EP5A	S07561 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1974-101	1974 Dec 19 0239:00	1974-101A	Helios 1	Helios 1	S07567 DFVLR	Titan IIIE	23E-2	CC	LC41	TR-1022
1974-102	1974 Dec 21 0219?	1974-102A	Kosmos-697	Yantar'-2K No. 2	S07571 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
1974-103	1974 Dec 24 1100?	1974-103A	Meteor	Meteor-MV	S07574 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1974-104	1974 Dec 26 0415	1974-104A	Kosmos-698	Tselina-O	S07576 MO SSSR	Kosmos 11K65M	53721-256	NIIP-53	LC132/1	RAEX
1974-105	1974 Dec 26 1200?	1974-105A	Symphonie 1	Symphonie MV1	S07578 CNES/DFVLR	Delta 2914	599/D106	CC	LC17B	TR-1022
1974-106	1974 Dec 27 0910?	1974-106A	Molniya-2	Molniya-2	S07583 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1975-001	1975 Jan 10 2143:37	1975-001A	Kosmos-699	US-P	S07587 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1975-002	1975 Jan 17 0907?	1975-002A	Salyut-4	DOS 4 (17K No. 124)	S07591 MOM	Proton-K	284-02	NIIP-5	LC81/24	NK9810-25
1975-003	1975 Jan 22 1755:22	1975-003A	Kosmos-700	Parus	S07593 MO SSSR	Kosmos 11K65M	53731-270	NIIP-53	LC132/1	RAEX
1975-004	1975 Jan 23 1100?	1975-004A	Kosmos-701	Zenit-4MK	S07596 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-005	1975 Jan 28 1205:01	1975-005A	Kosmos-702	Soyuz 7K-T No. 38	S07604 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1975-006	1975 Jan 30 1502	1975-007A	Kosmos-703	Zenit-2M	S07606 MOM	Voskhod 11A57	-	NIIP-5	-	RAE
1975-007	1975 Feb 5 1315?	1975-008A	Landsat 2	DS-P1-Yu No. 70	S07611 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1975-008	1975 Feb 6 0449?	1975-009A	Kosmos-704	Zenit-4MK	S07615 NASA GSFC	Delta 2910	598/D107	V	SLC2W	TR-1022
1975-009	1975 Feb 6 1635	1975-010A	Kosmos-705	Zenit-4MK	S07617 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-010	1975 Feb 6 2204:00	1975-011A	Kosmos-706	DS-P1-Yu No. 75	S07623 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1975-011	1975 Feb 12 0330?	1975-012A	Kosmos-707	OkO	S07625 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1975-012	1975 Feb 12 1430?	1975-013A	Kosmos-708	Tselina-O	S07637 MO SSSR	Kosmos 11K65M	53753-212	NIIP-53	LC132/1	RAEX
1975-013	1975 Feb 20 2335:00	1975-F01	Molniya-2	Molniya-2	S07641 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1975-F01	1975 Feb 24 0525	1975-014A	Starlette	Starlette	S07646 CNES	Diamant BP.4	No. 1	CSG	Diamant	JCM
1975-014	1975 Feb 26 0900?	1975-015A	SMS 2	SMS 2	S07648 NASA GSFC	Delta 2914	593/D108	CC	LC17B	TR-1022
1975-015	1975 Feb 28 1402?	1975-016A	Kosmos-709	Sfera	S07663 MO SSSR	Kosmos 11K65M	53749-166	NIIP-53	LC132/1	RAEX
1975-016	1975 Mar 10 0441	1975-017A	Kosmos-708	Zenit-4MK	S07664 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-017	1975 Mar 12 0855?	1975-018A	Kosmos-709	Zenit-4MK	F00722 Intelsat	SLV-3D Centaur	AC-33	CC	LC36A	TR-1022
1975-018	1975 Mar 21 0605?	1975-019A	Intelsat IV F6	Intelsat IV F6	S07671 ISAS	Mu-3C	KASC	M	ISRJ29-3.99	ISRJ29-3.99
1975-019	1975 Mar 26 0850?	1975-020A	Taiyo	SRATS	S07675 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-020	1975 Mar 27 0800?	1975-021A	Kosmos-710	Zenit-4MK	S07678 MO SSSR	Kosmos 11K65M	53749-157	NIIP-53	LC132/2	RAEX
1975-021	1975 Mar 27 1430	1975-022A	Kosmos-711	Strela-1M	S07678 MO SSSR	-	-	-	-	-
1975-022	1975 Apr 1 1230	1975-023A	Kosmos-712	Strela-1M	S07679 MO SSSR	-	-	-	-	-
1975-023	1975 Apr 2 1100?	1975-024D	Kosmos-713	Strela-1M	S07680 MO SSSR	-	-	-	-	-
1975-F02	1975 Apr 5 1104:54	1975-F02	Kosmos-714	Strela-1M	S07681 MO SSSR	-	-	-	-	-
1975-025	1975 Apr 7 1100?	1975-025B	Kosmos-715	Strela-1M	S07682 MO SSSR	-	-	-	-	-
1975-026	1975 Apr 8 1829:56	1975-026A	Kosmos-716	Strela-1M	S07683 MO SSSR	-	-	-	-	-
1975-027	1975 Apr 9 2358:02	1975-027A	Kosmos-717	Strela-1M	S07684 MO SSSR	-	-	-	-	-
1975-028	1975 Apr 11 0757?	1975-028A	Kosmos-718	Strela-1M	S07685 MO SSSR	-	-	-	-	-
1975-F03	1975 Apr 13 0051	1975-F03	Kosmos-719	Strela-1M	S07688 USAF/NSA	Titan 34B	3B-50 (34B-1)	V	SLC4W	JCM
1975-029	1975 Apr 14 1753	1975-029A	OPS 2439	Jumpseat 4	S07687 USAF/NSA	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-030	1975 Apr 16 0800?	1975-030A	Kosmos-720	Zenit-4MK	S07691 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-031	1975 Apr 18 1000?	1975-031A	Kosmos-721	Orion	S07696 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1975-032	1975 Apr 18 1648?	1975-032A	Kosmos-722	Zenit-2M	S07705 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-033	1975 Apr 19 0730?	1975-033A	Kapsula Kosmosa-721	Nauka	S07721 MOM	-	-	-	-	-
1975-034	1975 Apr 22 2110?	1975-034A	Kosmos-722	Zenit-4MK	S07709 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-035	1975 Apr 24 0805?	1975-035A	Kosmos-723	DS-U2-IK No. 5	S07710 IK	Kosmos 11K65M	53721-268	NIIP-53	LC132/1	AVMDS
1975-036	1975 Apr 29 1024?	1975-036A	Interkosmos-13	Meteor	S07714 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1975-037	1975 May 7 2245:01	1975-037A	Meteor	Meteor-MV	S07729 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1975-038	1975 May 7 2335:26	1975-038A	Kosmos-723	US-A	F00779 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1975-039	1975 May 17 1032	1975-039A	[Soyuz-18]	Soyuz 7K-T No. 39	F00725 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1975-040	1975 May 20 1403:48	1975-040B	Kosmos-724	US-A	S07922 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
			Kosmos-725	DS-P1-Yu No. 77	S07730 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
			Geos 3	Geos C	S07734 NASA Wallops	Delta 1410	584/D109	V	SLC2W	LR750410
			Kosmos-726	Parus	S07736 MO SSSR	Kosmos 11K65M	65033-203	NIIP-53	LC132/1	RAEX
			P72-2	P72-2	F00729 USAF STP	Atlas F	71F	V	SLC3W	JG9602
			Molniya-3	Molniya-3 No. 12	S07738 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
			Kosmos-727	Zenit-4MK	S07742 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
			Kosmos-728	Zenit-2M	S07745 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
			Kapsula Kosmosa-728	Nauka	S07779 MOM	-	-	-	-	-
			OPS 4883	KH8-44 GAMBIT	S07747 NRO/USAF	Titan 24B	3B-48 (24B-14)	V	SLC4W	RAE
			SRV-1	SRV-1	A01974 NRO/USAF	-	-	-	-	-
			SRV-2	SRV-2	A01976 NRO/USAF	-	-	-	-	-
			Aryabhata	ISS	S07752 ISRO	Kosmos 11K65M	53731-279	GTSP-4	LC107/2	RAEX
			Kosmos-729	Tsiklon	S07768 MO SSSR	Kosmos 11K65M	53731-274	NIIP-53	LC132/1	RAEX
			Kosmos-730	Zenit-4MK	S07770 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
			Molniya-1	Molniya-1	S07780 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
			SAS 3	SAS C	S07788 NASA GSFC	Scout F-1	S194C	SMLC	LA4FB	LA4FB
			Anik A3	Anik A3	S07790 Telesat	Delta 2914	596/D110	CC	LC17B	TR-1022
			Pollux	D-5A	S07801 CNES	Diamant BP.4	No. 2	CSG	Diamant	JCM
			Castor	D-5B	S07802 CNES	-	-	-	-	-
			DSCS II F-5	DSCS II B-5	S07807 USAF	Titan IIIC	23C-7	CC	LC40	PH960801
			DSCS II F-6	DSCS II B-6	S07808 USAF	-	-	-	-	-

1975-041	1975 May 21 0659?	1975-041A	Kosmos-731	Zenit-2M	S07810 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
		1975-041H	Kapsula Kosmosa-731	Nauka	S07885 MOM					
1975-042	1975 May 22 2204:00	1975-042A	Intelsat IV F1	Intelsat IV F1	S07815 Intelsat	SLV-3D Centaur	AC-35	CC	LC36A	TR-1022
1975-043	1975 May 24 0322:41	1975-043A	DMPSP 10533	DMPSP 5C F-2	S07816 USAF	Thor Burner 2A	197	V	SLC10W	SAC7383
1975-044	1975 May 24 1458:10	1975-044A	Soyuz-18	Soyuz 7K-T No. 40	S07818 MOM	Soyuz 11A511	-	NIIP-5	-	JCM
1975-045	1975 May 28 0025?	1975-045A	Kosmos-732	Strela-1M	S07820 MO SSSR	Kosmos 11K65M	53731-272	NIIP-53	LC132/1	RAEX
		1975-045B	Kosmos-733	Strela-1M	S07822 MO SSSR					
		1975-045C	Kosmos-734	Strela-1M	S07823 MO SSSR					
		1975-045D	Kosmos-735	Strela-1M	S07824 MO SSSR					
		1975-045E	Kosmos-736	Strela-1M	S07825 MO SSSR					
		1975-045F	Kosmos-737	Strela-1M	S07826 MO SSSR					
		1975-045G	Kosmos-738	Strela-1M	S07827 MO SSSR					
		1975-045H	Kosmos-739	Strela-1M	S07828 MO SSSR					
1975-046	1975 May 28 0729?	1975-046A	Kosmos-740	Zenit-4MK	S07821 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-047	1975 May 30 0645	1975-047A	Kosmos-741	Gektor-Priroda	S07877 MOM	Voskhod 11A57	-	NIIP-53	-	NK96-26-40
1975-F04	1975 Jun 3 0900	1975-F04	[Interkosmos-14]	DS-U3-1K No. 5	F00731 IK	Kosmos 11K65M	53721-257	GTSP-4	LC107/2	AVMDS
1975-048	1975 Jun 3 1321?	1975-048A	Kosmos-742	Zenit-4MK	S07900 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-049	1975 Jun 5 0138?	1975-049A	Molniya-1	Molniya-1 No. 24	S07903 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
		1975-049B	SRET-2	SRET-2	S07910 CNES					
1975-050	1975 Jun 8 0238:00	1975-050A	Venera-9	4V-1 No. 660	S07915 MOM	Proton-K/D	286-01	NIIP-5	LC81/24	NK9810-25
		1975-050D	SA Veneri-9	SA	S08411 MOM					
1975-051	1975 Jun 8 1830	1975-051A	OPS 6381	KH9-10 HEXAGON	S07918 NRO/CIA	Titan IIID	23D-10	V	SLC4E	LR750609
		1975-051C	SSU 1	SS C 5	S07937 USAF/NSA					
		1975-051	SRV-1	SRV-1	A01941 NRO					
		1975-051	SRV-2	SRV-2	A01943 NRO					
		1975-051	SRV-3	SRV-3	A01945 NRO					
		1975-051	SRV-4	SRV-4	A01947 NRO					
1975-052	1975 Jun 12 0812:01	1975-052A	Nimbus 6	Nimbus F	S07924 NASA GSFC	Delta 2910	595/D111	V	SLC2W	TR-1022
1975-053	1975 Jun 12 1230?	1975-053A	Kosmos-743	Zenit-4MK	S07925 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-054	1975 Jun 14 0300:31	1975-054A	Venera-10	4V-1 No. 661	S07947 MOM	Proton-K/D	285-02	NIIP-5	LC81/24	NK9810-25
		1975-054D	SA Veneri-10	SA	S08423 MOM					
1975-055	1975 Jun 18 0900	1975-055A	AFP-827	CANYON 6	S07963 USAF/NSA	SLV-3A Agena D	5506A	CC	LC13	CCMOPS
1975-056	1975 Jun 20 0654?	1975-056A	Kosmos-744	Tselina-D	S07968 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1975-057	1975 Jun 21 1143:00	1975-057A	Kosmos-745	OSO 8	S07970 NASA GSFC	Delta 1910	586/D112	CC	LC17B	TR-1022
1975-058	1975 Jun 24 1205	1975-058A	Kosmos-746	DS-P1-Yu No. 76	S07982 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1975-059	1975 Jun 25 1300?	1975-059A	Kosmos-747	Zenit-4MK	S07985 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-060	1975 Jun 27 1300?	1975-060A	Kosmos-747	Zenit-2M	S07990 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1975-060F	Kapsula Kosmosa-747	Nauka	S08013 MOM					
1975-061	1975 Jul 3 1340?	1975-061A	Kosmos-748	Zenit-4MK	S08006 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-062	1975 Jul 4 0056?	1975-062A	Kosmos-749	Tselina-O	S08009 MO SSSR	Kosmos 11K65M	53721-259	NIIP-53	LC132/1	RAEX
1975-063	1975 Jul 8 0505?	1975-063A	Molniya-2	Molniya-2	S08015 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1975-064	1975 Jul 11 0415	1975-064A	Meteor-2	Meteor-2	S08026 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1975-065	1975 Jul 15 1220:00	1975-065A	Soyuz-19	Soyuz 7K-TM No. 75 (EPSA)	S08030 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1975-066	1975 Jul 15 1950	1975-066B	Saturn S-IVB-210	Saturn S-IVB-210	S08033 NASA MSFC	Saturn IB	SA-210	LUTI, KSC	LC39B	KHR-1
		1975-066C	Docking Module 2	Apollo DM-2	S08042 NASA MSC					
		1975-066A	Apollo-Soyuz Test Project	Apollo CM-111	S08032 NASA MSC					
		1975-066	ASTP SM	Apollo SM-111	A01996 NASA MSC					
1975-067	1975 Jul 17 0910	1975-067A	Kosmos-750	DS-P1-1 No. 15	S08036 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1975-068	1975 Jul 23 1300?	1975-068A	Kosmos-751	Zenit-2M	S08040 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-069	1975 Jul 24 1900?	1975-069A	Kosmos-752	Vektor	S08043 MO SSSR	Kosmos 11K65M	53721-254	NIIP-53	LC132/1	RAEX
1975-070	1975 Jul 26 1328	1975-070A	JSSW 3	JSSW	S08053 MAI	Feng Bao 1	FB1-4	JQ	LA2B	JCM
1975-071	1975 Jul 31 1300?	1975-071A	Kosmos-753	Zenit-4MK	S08059 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-072	1975 Aug 9 0148:00	1975-072A	COS-B	COS-B	S08062 ESA	Delta 2913	602/D113	V	SLC2W	TR-1022
1975-073	1975 Aug 13 0721?	1975-073A	Kosmos-754	Zenit-4MK	S08069 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-074	1975 Aug 14 1329?	1975-074A	Kosmos-755	Parus	S08072 MO SSSR	Kosmos 11K65M	53731-288	NIIP-53	LC132/1	RAEX
1975-075	1975 Aug 20 2122:00	1975-075A	Viking Orbiter 1	Viking Orbiter 1	S08108 NASA JPL	Titan IIIE	23E-4	CC	LC41	PH960801
		1975-075C	Mutch Memorial Station	Viking Lander 1	S09024 NASA LaRC					
1975-076	1975 Aug 22 0211?	1975-076A	Kosmos-756	Tselina-D	S08127 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1975-077	1975 Aug 27 0141:00	1975-077A	Symphonie 2	Symphonie MV2	S08132 CNES/DFVLR	Delta 2914	594/D114	CC	LC17A	TR-1022
1975-078	1975 Aug 27 1445?	1975-078A	Kosmos-757	Zenit-4MK	S08147 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-079	1975 Sep 2 1309?	1975-079A	Molniya-1	Molniya-1	S08187 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1975-080	1975 Sep 5 1450	1975-080A	Kosmos-758	Yantar'-2K No. 3	S08191 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
1975-081	1975 Sep 9 0019?	1975-081A	Molniya-2	Molniya-2	S08195 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1975-082	1975 Sep 9 0530	1975-082A	Kiku-1	ETS 1	S08197 NASDA	N-1	N-1 (F)	TNSC	N	WW-NASDA
1975-083	1975 Sep 9 1839:00	1975-083A	Viking Orbiter 2	Viking Orbiter 2	S08199 NASA JPL	Titan IIIE	23E-3	CC	LC41	PH960801
		1975-083C	Viking Lander 2	Viking Lander 2	S09408 NASA LaRC					
1975-084	1975 Sep 12 0530?	1975-084A	Kosmos-759	Orion	S08275 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1975-085	1975 Sep 16 0900?	1975-085A	Kosmos-760	Zenit-4MK	S08281 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-086	1975 Sep 17 0710?	1975-086A	Kosmos-761	Strela-1M	S08285 MO SSSR	Kosmos 11K65M	53746-311	NIIP-53	LC132/1	RAEX
		1975-086B	Kosmos-762	Strela-1M	S08286 MO SSSR					
		1975-086C	Kosmos-763	Strela-1M	S08287 MO SSSR					
		1975-086D	Kosmos-764	Strela-1M	S08288 MO SSSR					
		1975-086E	Kosmos-765	Strela-1M	S08289 MO SSSR					
		1975-086F	Kosmos-766	Strela-1M	S08290 MO SSSR					
		1975-086G	Kosmos-767	Strela-1M	S08291 MO SSSR					
		1975-086H	Kosmos-768	Strela-1M	S08292 MO SSSR					
1975-087	1975 Sep 18 0012	1975-087A	Meteor	Meteor-MV	S08293 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1975-088	1975 Sep 23 1000?	1975-088A	Kosmos-769	Zenit-2M	S08322 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1975-088	Kapsula Kosmosa-769	FEU-170-13 No. 5L	A02021 MOM					
1975-089	1975 Sep 24 1200?	1975-089A	Kosmos-770	Sfera	S08325 MO SSSR	Kosmos 11K65M	53721-260	NIIP-53	LC132/1	RAEX
1975-090	1975 Sep 25 0950	1975-090A	Kosmos-771	Fram	S08327 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1975-091	1975 Sep 26 0017:00	1975-091A	Intelsat IVA F1	Intelsat IVA F1	S08330 Intelsat	SLV-3D Centaur	AC-36	CC	LC36B	TR-1022



1975-092	1975 Sep 27 0837	1975-092A	Aura	D-2B	S08332 CNES	Diamant BP.4	No. 3	CSG	Diamant	JCM
1975-093	1975 Sep 29 0415?	1975-093A	Kosmos-772	Soyuz 7K-S No. 2L	S08338 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1975-094	1975 Sep 30 1838?	1975-094A	Kosmos-773	Strela-2	S08343 MO SSSR	Kosmos 11K65M	53721-258	NIIP-53	LC132/1	RAEX
1975-095	1975 Oct 1 0830?	1975-095A	Kosmos-774	Zenit-4MK	S08345 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-096	1975 Oct 6 0900:00	1975-096A	AE-D	AE-D	S08353 NASA GSFC	Delta 2910	600/D115	V	SLC2W	TR-1022
1975-097	1975 Oct 8 0030:00	1975-097A	Kosmos-775	Oko?	S08357 MOM	Proton-K/DM	286-02	NIIP-5	LC81/23	NK9810-25
1975-098	1975 Oct 9 1915	1975-098A	OPS 5499	KH8-45 GAMBIT	S08360 NRO/USAF	Titan 24B	3B-47 (24B-13)	V	SLC4W	JCM
		1975-098	SRV-1	SRV-1	A02024 NRO/USAF					
		1975-098	SRV-2	SRV-2	A02026 NRO/USAF					
1975-099	1975 Oct 12 0639:36	1975-099A	TIP 2	TIP 2	S08361 USN	Scout D-1	S195C	V	SLC5	LAAFB
1975-F05	1975 Oct 16 0404:56	1975-F05	[Luna-24] KT	E-8-5M No. 412	F00737 MOM	Proton-K/D	287-02	NIIP-5	LC81/23	NK9810-25
		1975-F05	[Luna-24] VA	VA	F00739 MOM					
1975-100	1975 Oct 16 2240:00	1975-100A	GOES 1	GOES A	S08366 NOAA	Delta 2914	597/D116	CC	LC17B	CCMOPS
1975-101	1975 Oct 17 1430?	1975-101A	Kosmos-776	Zenit-2M	S08369 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1975-101D	Kapsula Kosmosa-776	Nauka	S08412 MOM					
1975-102	1975 Oct 29 1100?	1975-102A	Kosmos-777	US-P	S08416 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1975-103	1975 Nov 4 1013?	1975-103A	Kosmos-778	Parus	S08419 MO SSSR	Kosmos 11K65M	53731-275	NIIP-53	LC132/1	RAEX
1975-104	1975 Nov 4 1520?	1975-104A	Kosmos-779	Zenit-4MK	S08420 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1975-105	1975 Nov 14 1914	1975-105A	Molniya-3	Molniya-3 No. 13	S08425 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1975-106	1975 Nov 17 1436?	1975-106A	Soyuz-20	Soyuz 7K-T(A9) No. 64	S08430 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1975-107	1975 Nov 20 0206:48	1975-107A	AE-E	AE-E	S08440 NASA GSFC	Delta 2910	604/D117	CC	LC17B	TR-1022
1975-108	1975 Nov 21 0920?	1975-108A	Kosmos-780	Zenit-2M	S08442 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
		1975-108D	Kapsula Kosmosa-780	Nauka	S08460 MOM					
1975-109	1975 Nov 21 1711?	1975-109A	Kosmos-781	Tselina-O	S08444 MO SSSR	Kosmos 11K65M	53731-271	NIIP-53	LC132/1	RAEX
1975-110	1975 Nov 25 1700	1975-110A	Kosmos-782	Bion No. 3	S08450 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK96-26-34
1975-111	1975 Nov 26 0329	1975-111A	FSW-1	FSW-1	S08452 MAI	Chang Zheng 2C	CZ2C-1 (4)	JQ	LA2B	MTR-1
		1975-111	FSW RV	FSW RV	A02035 MAI					
1975-112	1975 Nov 28 0010?	1975-112A	Kosmos-783	Strela-2	S08458 MO SSSR	Kosmos 11K65M	53721-252	NIIP-53	LC132/1	RAEX
1975-113	1975 Dec 3 1000?	1975-113A	Kosmos-784	Zenit-2M	S08463 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
		1975-113G	Kapsula Kosmosa-784	Nauka	S08485 MOM					
1975-114	1975 Dec 4 2038?	1975-114A	OPS 4428	KH9-11 HEXAGON	S08467 NRO/CIA	Titan IIID	23D-13	V	SLC4E	RAE
		1975-114B	S3-2	S3-2	S08468 USAF					
		1975-114	SRV-1	SRV-1	A01949 NRO					
		1975-114	SRV-2	SRV-2	A01951 NRO					
		1975-114	SRV-3	SRV-3	A01953 NRO					
		1975-114	SRV-4	SRV-4	A01955 NRO					
1975-F06	1975 Dec 6 0335:01	1975-F06	DAD-A	DAD-A	F00743 NASA LaRC	Scout F-1	S196C	V	SLC5	NASAHIST
		1975-F06	DAD-B	DAD-B	F00744 NASA LaRC					
1975-115	1975 Dec 11 1700	1975-115A	Interkosmos-14	DS-UZ-1K No. 6	S08471 IK	Kosmos 11K65M	53746-308	NIIP-53	LC132/1	AVMDS
1975-116	1975 Dec 12 1245?	1975-116C	Kosmos-785	US-A	S08480 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1975-117	1975 Dec 13 0156:14	1975-117A	Satcom 1	RCA-A	S08476 RCA Americom	Delta 3914	607/D118	CC	LC17A	TR-1022
1975-118	1975 Dec 14 0515:00	1975-118A	DSP F5	DSP 8	S08482 USAF	Titan IIIC	23C-11	CC	LC40	PH960801
1975-119	1975 Dec 16 0919	1975-119A	JSSW 4	JSSW	S08488 MAI	Feng Bao 1	FBI-5	JQ	LA2B	JCM
1975-120	1975 Dec 16 0950?	1975-120A	Kosmos-786	Zenit-4MK	S08489 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1975-121	1975 Dec 17 1106?	1975-121A	Molniya-2	Molniya-2	S08492 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1975-F07	1975 Dec 19	1975-F07	Kosmos	Lira	F00748 MO SSSR	Kosmos 11K65M	53721-263	NIIP-53	LC132/1	AVMNLJ
1975-122	1975 Dec 22 0208?	1975-122A	Prognoz-4	SO-M No. 504	S08510 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAEX
1975-123	1975 Dec 22 1300	1975-123A	Raduga	Gran' No. 11L	S08513 MOM	Proton-K/DM	288-01	NIIP-5	LC81/24	NK9810-25
1975-124	1975 Dec 25 1900	1975-124A	Meteor	Meteor-MV	S08519 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1975-125	1975 Dec 27 1022	1975-125A	Molniya-3	Molniya-3 No. 15	S08521 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1976-001	1976 Jan 6 0452?	1976-001A	Tselina-O	Tselina-O	S08530 MO SSSR	Kosmos 11K65M	53731-269	NIIP-53	LC132/1	RAEX
1976-002	1976 Jan 7 1535?	1976-002A	Kosmos-788	Zenit-4MK	S08551 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1976-003	1976 Jan 15 0534:00	1976-003A	Helios 2	Helios 2	S08582 DFVLR	Titan IIIE	23E-5	CC	LC41	PH960801
1976-004	1976 Jan 17 2327:54	1976-004A	Hermes	CTS	S08585 CRC	Delta 2914	606/D119	CC	LC17B	MOR E-610-76-
		01								
1976-005	1976 Jan 20 1708?	1976-005A	Kosmos-789	Parus	S08591 MO SSSR	Kosmos 11K65M	53749-164	NIIP-53	LC132/1	RAEX
1976-006	1976 Jan 22 1138?	1976-006A	Molniya-1	Molniya-1	S08601 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1976-007	1976 Jan 22 2226?	1976-007A	Kosmos-790	Tselina-O	S08604 MO SSSR	Kosmos 11K65M	53731-285	NIIP-53	LC132/1	RAEX
1976-008	1976 Jan 28 1039?	1976-008A	Kosmos-791	Strela-1M	S08607 MO SSSR	Kosmos 11K65M	53731-281	NIIP-53	LC132/1	RAEX
		1976-008B	Kosmos-792	Strela-1M	S08608 MO SSSR					
		1976-008C	Kosmos-793	Strela-1M	S08609 MO SSSR					
		1976-008D	Kosmos-794	Strela-1M	S08610 MO SSSR					
		1976-008E	Kosmos-795	Strela-1M	S08611 MO SSSR					
		1976-008F	Kosmos-796	Strela-1M	S08612 MO SSSR					
		1976-008G	Kosmos-797	Strela-1M	S08613 MO SSSR					
		1976-008H	Kosmos-798	Strela-1M	S08614 MO SSSR					
1976-009	1976 Jan 29 0830?	1976-009A	Kosmos-799	Zenit-2M	S08616 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1976-010	1976 Jan 29 2356	1976-010A	Intelsat IVA F2	Intelsat IVA F2	S08620 Intelsat	SLV-3D Centaur	AC-37	CC	LC36B	KHR-1
1976-011	1976 Feb 3 0816?	1976-011A	Kosmos-800	Tsiklon	S08645 MO SSSR	Kosmos 11K65M	53721-282	NIIP-53	LC132/1	RAEX
1976-F01	1976 Feb 4	1976-F01	CORSA	CORSA	F00750 ISAS	Mu-3C	M-3C-3	KASC	M	SRJ
1976-012	1976 Feb 5 1430	1976-012A	Kosmos-801	DS-P1-I No. 16	S08658 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1976-013	1976 Feb 11 0850?	1976-013A	Kosmos-802	Zenit-4MK	S08681 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1976-014	1976 Feb 12 1300?	1976-014A	Kosmos-803	Lira	S08688 MO SSSR	Kosmos 11K65M	53731-286	NIIP-53	LC132/2	RAEX
1976-015	1976 Feb 16 0829?	1976-015A	Kosmos-804	IS	S08694 PKO	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-016	1976 Feb 19 0752:52	1976-016A	DMSP 11534	DMSP 5C F-3	S08696 USAF	Thor Burner 2A	182	V	SLC10W	SAC7383
1976-017	1976 Feb 19 2232	1976-017A	Marisat 101	Marisat A	S08697 Comsat	Delta 2914	603/D120	CC	LC17B	KHR-1
1976-018	1976 Feb 20 1401	1976-018A	Kosmos-805	Yantar'-2K No. 4	S08699 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1976-018	Spuskaemiy Kapsula	SpK	A02057 MOM					
		1976-018	Spuskaemiy Kapsula	SpK	A02064 MOM					
1976-019	1976 Feb 29 0330	1976-019A	Ume	ISS	S08709 NASDA	N-1	N-2 (F)	TNSC	N	WWW-NASDA
1976-020	1976 Mar 10 0800?	1976-020A	Kosmos-806	Zenit-4MK	S08737 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-021	1976 Mar 11 1945?	1976-021A	Molniya-1	Molniya-1	S08741 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX

1976-022	1976 Mar 12 1330?	1976-022A	Kosmos-807	Vektor	S08744 MO SSSR	Kosmos 11K65M	53746-310	NIIP-53	LC132/1	RAEX
1976-023	1976 Mar 15 0125:40	1976-023A	LES 8	LES 8	S08746 USAF	Titan IIC	23C-12	CC	LC40	PH960801
		1976-023B	LES 9	LES 9	S08747 USAF					
		1976-023C	SR 11A	SR 11A	S08748 USAF					
		1976-023D	SR 11B	SR 11B	S08749 USAF					
1976-024	1976 Mar 16 1722?	1976-024A	Kosmos-808	Tselina-D	S08754 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1976-025	1976 Mar 18 0915?	1976-025A	Kosmos-809	Zenit-2M	S08758 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-026	1976 Mar 19 1931?	1976-026A	Molniya-1	Molniya-1	S08762 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1976-027	1976 Mar 22 1814?	1976-027A	OPS 7600	KH8-46 GAMBIT	S08770 NRO/USAF	Titan 24B	24B-18 (3B-52)	V	SLC4W	RAE
		1976-027	SRV-1	SRV-1	A02070 NRO/USAF					
		1976-027	SRV-2	SRV-2	A02072 NRO/USAF					
1976-028	1976 Mar 26 1500?	1976-028A	Kosmos-810	Zenit-4MK	S08772 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1976-029	1976 Mar 26 2247	1976-029A	Satcom 2	RCA-B	S08774 RCA Americom	Delta 3914	610/D121	CC	LC17A	KHR-1
1976-030	1976 Mar 31 1250?	1976-030A	Kosmos-811	Orion	S08781 MOM	Soyuz 11A511M	-	NIIP-53	-	RAEX
1976-031	1976 Apr 6 0414?	1976-031A	Kosmos-812	Tselina-O	S08794 MO SSSR	Kosmos 11K65M	53731-280	NIIP-53	LC132/1	RAEX
1976-032	1976 Apr 7 1305	1976-032A	Meteor	Meteor-MV No. 37	S08799 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1976-033	1976 Apr 9 0830?	1976-033A	Kosmos-813	Zenit-2M	S08801 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1976-034	1976 Apr 13 1716?	1976-034A	Kosmos-814	IS	S08806 PKO	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-035	1976 Apr 22 2046	1976-035A	NATO 3A	NATO 3A	S08808 NATO	Delta 2914	608/D122	CC	LC17B	KHR-1
1976-036	1976 Apr 28 0930?	1976-036A	Kosmos-815	Zenit-4MK	S08811 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1976-037	1976 Apr 28 1330?	1976-037A	Kosmos-816	Romb	S08812 MO SSSR	Kosmos 11K65M	53746-301	NIIP-53	LC132/1	RAEX
		1976-037C	Kosmos-816 SS 1	ESO	S08885 MO SSSR					
		1976-037D	Kosmos-816 SS 2	ESO	S08886 MO SSSR					
		1976-037E	Kosmos-816 SS 3	ESO	S09396 MO SSSR					
		1976-037F	Kosmos-816 SS 4	ESO	S09397 MO SSSR					
		1976-037G	Kosmos-816 SS 5	ESO	S09428 MO SSSR					
		1976-037H	Kosmos-816 SS 6	ESO	S09429 MO SSSR					
		1976-037J	Kosmos-816 SS 7	ESO	S09430 MO SSSR					
		1976-037K	Kosmos-816 SS 8	ESO	S09431 MO SSSR					
		1976-037L	Kosmos-816 SS 9	ESO	S09432 MO SSSR					
		1976-037M	Kosmos-816 SS 10	ESO	S09438 MO SSSR					
		1976-037N	Kosmos-816 SS 11	ESO	S09475 MO SSSR					
		1976-037P	Kosmos-816 SS 12	ESO	S09476 MO SSSR					
		1976-037Q	Kosmos-816 SS 13	ESO	S09485 MO SSSR					
		1976-037R	Kosmos-816 SS 14	ESO	S09487 MO SSSR					
		1976-037S	Kosmos-816 SS 15	ESO	S09488 MO SSSR					
		1976-037T	Kosmos-816 SS 16	ESO	S09489 MO SSSR					
		1976-037U	Kosmos-816 SS 17	ESO	S09490 MO SSSR					
		1976-037V	Kosmos-816 SS 18	ESO	S09507 MO SSSR					
		1976-037W	Kosmos-816 SS 19	ESO	S09508 MO SSSR					
		1976-037X	Kosmos-816 SS 20	ESO	S09511 MO SSSR					
		1976-037Y	Kosmos-816 SS 21	ESO	S09512 MO SSSR					
		1976-037Z	Kosmos-816 SS 22	ESO	S09513 MO SSSR					
		1976-037AA	Kosmos-816 SS 23	ESO	S09514 MO SSSR					
1976-038	1976 Apr 30 1912	1976-038A	OPS 6431	PARCAE 1	S08818 USN	Atlas F/MSD	59F	V	SLC3W	JCM
		1976-038C	SSU	SSU	S08835 USN					
		1976-038D	SSU	SSU	S08836 USN					
		1976-038J	SSU	SSU	S08884 USN					
1976-039	1976 May 4 0800	1976-039A	Lageos	Lageos	S08820 NASA MSFC	Delta 2913	609/D123	V	SLC2W	KHR-1
1976-040	1976 May 5 0750?	1976-040A	Kosmos-817	Zenit-4MK	S08823 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1976-041	1976 May 12 1757	1976-041A	Molniya-3	Molniya-3 No. 16	S08833 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1976-042	1976 May 13 2228	1976-042A	Comstar D-1	Comstar D-1	S08838 Comsat	SLV-3D Centaur	AC-38	CC	LC36A	KHR-1
1976-043	1976 May 15 1330	1976-043A	Meteor	Meteor-Priroda No. 2-1	S08845 MOM	Vostok 8A92M	-	NIIP-53	LC43/3	NK9817-36
1976-044	1976 May 18 1100	1976-044A	Kosmos-818	DS-P1-Yu No. 78	S08851 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1976-045	1976 May 20 0900?	1976-045A	Kosmos-819	Zenit-2M	S08853 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1976-046	1976 May 21 0700	1976-046A	Kosmos-820	Fram	S08856 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1976-047	1976 May 22 0742:16	1976-047A	P76-5	NNS O-15	S08860 USAF STP	Scout B-1	S179CR	V	SLC5	LAAPB
1976-048	1976 May 26 0900?	1976-048A	Kosmos-821	Zenit-4MK	S08862 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1976-049	1976 May 28 1500?	1976-049A	Kosmos-822	Vektor	S08865 MO SSSR	Kosmos 11K65M	53716-328	NIIP-53	LC132/1	RAEX
1976-050	1976 Jun 2 2056	1976-050A	OPS 7837	SDS 1	S08871 NRO/USAF	Titan 34B	34B-5 (3B-55)	V	SLC4W	JG9602
1976-051	1976 Jun 2 2230?	1976-051A	Kosmos-823	Tsiklon	S08873 MO SSSR	Kosmos 11K65M	53731-283	NIIP-53	LC132/2	RAEX
1976-052	1976 Jun 8 0700?	1976-052A	Kosmos-824	Zenit-4MK	S08877 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1976-053	1976 Jun 10 0009	1976-053A	Marisat 102	Marisat B	S08882 Comsat	Delta 2914	601/D124	CC	LC17A	KHR-1
1976-054	1976 Jun 15 1319?	1976-054A	Kosmos-825	Strela-1M	S08889 MO SSSR	Kosmos 11K65M	53731-277	NIIP-53	LC132/2	RAEX
		1976-054B	Kosmos-826	Strela-1M	S08890 MO SSSR					
		1976-054C	Kosmos-827	Strela-1M	S08891 MO SSSR					
		1976-054D	Kosmos-828	Strela-1M	S08892 MO SSSR					
		1976-054E	Kosmos-829	Strela-1M	S08893 MO SSSR					
		1976-054F	Kosmos-830	Strela-1M	S08894 MO SSSR					
		1976-054G	Kosmos-831	Strela-1M	S08895 MO SSSR					
		1976-054H	Kosmos-832	Strela-1M	S08896 MO SSSR					
1976-055	1976 Jun 16 1310?	1976-055A	Kosmos-833	Zenit-4MK	S08898 MOM	Voskhod 11A57	-	NIIP-53	-	RAEX
1976-056	1976 Jun 19 1600	1976-056A	Interkosmos-15	AUOS-Z-T-1K	S08903 IK	Kosmos 11K65M	53731-276	NIIP-53	LC132/1	NK9521-43
1976-057	1976 Jun 22 1804:00	1976-057A	Salyut-5	Almaz OPS 3	S08911 MOM	Proton-K	290-02	NIIP-5	LC81/23	NK9810-25
		1976-057	KSI	KSI No. 0506	A02172 MOM					
1976-058	1976 Jun 24 0710?	1976-058A	Kosmos-834	Zenit-2M	S08914 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-059	1976 Jun 26 0300:01	1976-059A	DSP F6	DSP 7	S08916 USAF	Titan IIC	23C-10	CC	LC40	PH960801
1976-060	1976 Jun 29 0720?	1976-060A	Kosmos-835	Zenit-4MK	S08922 MOM	Voskhod 11A57	-	NIIP-5	-	RAEX
1976-061	1976 Jun 29 0812?	1976-061A	Kosmos-836	Strela-2	S08923 MO SSSR	Kosmos 11K65M	53731-284	NIIP-53	LC132/2	RAEX
1976-062	1976 Jul 1 0806	1976-062A	Kosmos-837	Molniya-2	S08927 MOM	Molniya 8K78M	-	NIIP-53	-	NK9701-29
1976-063	1976 Jul 2 1030?	1976-063A	Kosmos-838	US-P	S08932 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-064	1976 Jul 6 1208:45	1976-064A	Soyuz-21	Soyuz 7K-T No. 41	S08934 MOM	Soyuz 11A511	-	NIIP-5	-	JBIS55-45

1976-065	1976 Jul 8 1830	1976-065A 1976-065B 1976-065C	OPS 4699 S3-3 OPS 5366	KH9-12 HEXAGON S3-3 SS D 1	S09006 NRO/CIA S09007 USAF S09008 USAF/NSA	Titan IIID	23D-14	V	SLC4E	JG9602
		1976-065	SRV-1	SRV-1	A02046 NRO					
		1976-065	SRV-2	SRV-2	A02048 NRO					
		1976-065	SRV-3	SRV-3	A02050 NRO					
		1976-065	SRV-4	SRV-4	A02052 NRO					
1976-067	1976 Jul 8 2108?	1976-067A	Kosmos-839	Lira	S09011 MO SSSR	Kosmos 11K65M	53716-324	NIIP-53	LC132/1	RAEX
1976-066	1976 Jul 8 2331	1976-066A	Palapa A1	Palapa A1	S09009 Perumtel	Delta 2914	611/D125	CC	LC17A	KHR-1
1976-068	1976 Jul 14 0900?	1976-068A	Kosmos-840	Zenit-2M	S09019 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-069	1976 Jul 15 1311?	1976-069A	Kosmos-841	Strela-2	S09022 MO SSSR	Kosmos 11K65M	53746-304	NIIP-53	LC132/1	RAEX
1976-070	1976 Jul 21 1020?	1976-070A	Kosmos-842	Sfera	S09025 MO SSSR	Kosmos 11K65M	53731-266	NIIP-53	LC132/1	RAEX
1976-071	1976 Jul 21 1514?	1976-071A	Kosmos-843	IS	S09043 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-072	1976 Jul 22 1540	1976-072A	Kosmos-844	Yantar'-2K No. 5	S09046 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1976-072	Spuskaemiy Kapsula	SpK	A02107 MOM					
		1976-072	Spuskaemiy Kapsula	SpK	A02109 MOM					
1976-073	1976 Jul 22 2204:00	1976-073A	Comstar D-2	Comstar D-2	S09047 Comsat	SLV-3D Centaur	AC-40	CC	LC36B	CCMOPS
1976-074	1976 Jul 23 1549?	1976-074A	Molniya-1	Molniya-1	S09049 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1976-075	1976 Jul 27 0521?	1976-075A	Kosmos-845	Tselina-O	S09053 MO SSSR	Kosmos 11K65M	53746-307	NIIP-53	LC132/2?	RAEX
1976-076	1976 Jul 27 1200	1976-076A	Interkosmos-16	DS-UJ-IK No. 6?	S09055 IKI	Kosmos 11K65M	53746-316	GTSP-4	LC107/2	AVMDS
1976-077	1976 Jul 29 1707	1976-077A	NOAA 5	ITOS H	S09057 NOAA	Delta 2310	605/D126	V	SLC2W	KHR-1
1976-078	1976 Jul 29 2003?	1976-078A	Kosmos-846	Tsiklon	S09061 MO SSSR	Kosmos 11K65M	53716-329	NIIP-53	LC132/1	RAEX
1976-079	1976 Aug 4 1340?	1976-079A	Kosmos-847	Zenit-4MK	S09214 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-080	1976 Aug 6 2221	1976-080A	OPS 7940	SDS 2	S09270 NRO/USAF	Titan 34B	34B-6 (3B-56)	V	SLC4W	JG9602
1976-081	1976 Aug 9 1504:12	1976-081E	Luna-24 VA	VA	S09384 MOM	Proton-K/D-1	288-02	NIIP-5	LC81/23	NK9810-25
		1976-081A	Luna-24 KT	E-8-5M No. 413	S09272 MOM					
1976-082	1976 Aug 12 1330?	1976-082A	Kosmos-848	Zenit-2M	S09280 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1976-082D	Kapsula Kosmosa-848	Nauka	S09374 MOM					
1976-083	1976 Aug 18 0930	1976-083A	Kosmos-849	DS-P1-I No. 17	S09382 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1976-U01	1976 Aug 19 0525	-	Luna-24 VA	E-8-5 VA No. 413	MOM	E-8-5 VA	No. 413	CRI24	KT-413	JCM
1976-084	1976 Aug 26 1100	1976-084A	Kosmos-850	DS-P1-Yu No. 79	S09387 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1976-085	1976 Aug 27 1435?	1976-085A	Kosmos-851	Tselina-D	S09389 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1976-086	1976 Aug 28 0900?	1976-086A	Kosmos-852	Zenit-4MK	S09391 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-087	1976 Aug 30 1153	1976-087A	JSSW 5	JSSW	S09394 MAI	Feng Bao 1	FBI-6	JQ	LA2B	JCM
1976-088	1976 Sep 1 0323	1976-088A	Kosmos-853	Molniya-2	S09398 MOM	Molniya 8K78M	-	NIIP-53	-	NK9701-29
1976-089	1976 Sep 1 2114:02	1976-089A	TIP 3	TIP 3	S09403 USN	Scout D-1	S197C	V	SLC5	LAAFB
1976-090	1976 Sep 3 0920?	1976-090A	Kosmos-854	Zenit-4MK	S09405 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-091	1976 Sep 11 0800:55	1976-091A	DMSP 5D F-1	DMSP 5D S-1	S09415 USAF	Thor DSV-2U	172	V	SLC10W	SAC7383
1976-092	1976 Sep 11 1824:00	1976-092A	Raduga	Gran' No. 12L	S09416 MOM	Proton-K/DM	289-01	NIIP-5	LC81/24	NK9810-25
1976-093	1976 Sep 15 0948:30	1976-093A	Soyuz-22	Soyuz 7K-TM No. 74	S09421 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1976-094	1976 Sep 15 1850	1976-094A	OPS 8533	KH8-47 GAMBIT	S09426 NRO/USAF	Titan 24B	24B-17 (3B-51)	V	SLC4W	JG9602
		1976-094	SRV-1	SRV-1	A02125 NRO/USAF					
		1976-094	SRV-2	SRV-2	A02127 NRO/USAF					
1976-095	1976 Sep 21 1140?	1976-095A	Kosmos-855	Orion	S09433 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-096	1976 Sep 22 0930?	1976-096A	Kosmos-856	Zenit-2M	S09435 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1976-096E	Kapsula Kosmosa-856	Nauka	S09448 MOM					
1976-097	1976 Sep 24 1500?	1976-097A	Kosmos-857	Zenit-4MK	S09439 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-098	1976 Sep 29 0704?	1976-098A	Kosmos-858	Strela-2	S09443 MO SSSR	Kosmos 11K65M	53716-333	NIIP-53	LC132/2	RAEX
1976-F02	1976 Oct 4 1100	1976-F02	[Kosmos]	Fram	F00752 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1976-099	1976 Oct 10 0935?	1976-099A	Kosmos-859	Zenit-4MK	S09471 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-100	1976 Oct 14 1738:18	1976-100A	Soyuz-23	Soyuz 7K-T(A9) No. 65	S09477 MOM	Soyuz 11A511U	-	NIIP-5	-	JBIS55-45
1976-101	1976 Oct 14 2244	1976-101A	Marisat C	Marisat C	S09478 Comsat	Delta 2914	614/D127	CC	LC17A	KHR-1
1976-102	1976 Oct 15 2259:38	1976-102A	Meteor	Meteor-MV	S09481 MOM	Vostok 8A92M	-	NIIP-53	-	PL-wwW
1976-103	1976 Oct 17 1806?	1976-103B	Kosmos-860	US-A	S09531 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-104	1976 Oct 21 1653?	1976-104C	Kosmos-861	US-A	S09631 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-105	1976 Oct 22 0912	1976-105A	Kosmos-862	Oko	S09495 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1976-106	1976 Oct 25 1430?	1976-106A	Kosmos-863	Zenit-4MK	S09499 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-107	1976 Oct 26 1450:00	1976-107A	Ekran	Ekran No. 11L	S09503 MOM	Proton-K/DM	290-01	NIIP-5	LC81/24	NK9810-25
1976-108	1976 Oct 29 1240?	1976-108A	Kosmos-864	Parus	S09509 MO SSSR	Kosmos 11K65M	53772-414	NIIP-53	LC132/2	RAEX
1976-109	1976 Nov 1 1120?	1976-109A	Kosmos-865	Zenit-2M	S09515 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1976-109G	Kosmos-865 subsatellite?	MKA?	S09525 MOM					
1976-F03	1976 Nov 10	1976-F03	JSSW 6	JSSW?	F00757 MAI	Feng Bao 1	FBI-7	JQ	LA2B	JCM
1976-110	1976 Nov 11 1045?	1976-110A	Kosmos-866	Zenit-4MK	S09532 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-111	1976 Nov 23 1627?	1976-111A	Kosmos-867	Zenit-6	S09552 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-112	1976 Nov 25 0359?	1976-112A	Prognoz-5	SO-M No. 505	S09557 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAEX
1976-113	1976 Nov 26 1430?	1976-113A	Kosmos-868	US-P	S09561 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-114	1976 Nov 29 1600?	1976-114A	Kosmos-869	Soyuz 7K-S No. 3L	S09564 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-115	1976 Dec 2 0017?	1976-115A	Kosmos-870	Tselina-O	S09573 MO SSSR	Kosmos 11K65M	53731-273	NIIP-53	LC132/2	RAEX
1976-116	1976 Dec 2 0245?	1976-116A	Molniya-2	Molniya-2	S09574 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1976-117	1976 Dec 7 0438	1976-117A	FSW	FSW	S09587 MAI	Chang Zheng 2C	CZ2C-2 (5)	JQ	LA2B	MTR-1
		1976-117	FSW RV	FSW RV	A02145 MAI					
1976-118	1976 Dec 7 1023?	1976-118A	Kosmos-871	Strela-1M	S09588 MO SSSR	Kosmos 11K65M	53716-330	NIIP-53	LC132/1	RAEX
		1976-118B	Kosmos-872	Strela-1M	S09589 MO SSSR					
		1976-118C	Kosmos-873	Strela-1M	S09590 MO SSSR					
		1976-118D	Kosmos-874	Strela-1M	S09591 MO SSSR					
		1976-118E	Kosmos-875	Strela-1M	S09592 MO SSSR					
		1976-118F	Kosmos-876	Strela-1M	S09593 MO SSSR					
		1976-118G	Kosmos-877	Strela-1M	S09594 MO SSSR					
		1976-118H	Kosmos-878	Strela-1M	S09595 MO SSSR					
1976-119	1976 Dec 9 1000?	1976-119A	Kosmos-879	Zenit-2M	S09599 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1976-120	1976 Dec 9 2000?	1976-120A	Kosmos-880	Lira	S09601 MO SSSR	Kosmos 11K65M	53719-153	NIIP-53	LC132/2	RAEX
1976-121	1976 Dec 15 0130	1976-121A	Kosmos-881	TKS VA LVI-1 No. 009	S09606 MOM	Proton-K	289-02	NIIP-5	LC81/24	NK9810-25

			1976-121B	Kosmos-882	TKS VA LVI-1 No. 009	S09607 MOM					
			1976-121D	TKS GVM	TKS GVM	S09609 MOM					
1976-122	1976 Dec 15 1400?		1976-122A	Kosmos-883	Tsikada	S09610 MO SSSR	Kosmos 11K65M	53782-426	NIIP-53	LC132/1	RAEX
1976-123	1976 Dec 17 0930?		1976-123A	Kosmos-884	Zenit-4MK	S09614 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1976-124	1976 Dec 17 1200?		1976-124A	Kosmos-885	Romb	S09615 MO SSSR	Kosmos 11K65M	53721-255	NIIP-53	LC132/2	RAEX
			1976-124C	Kosmos-885 SS 1	ESO	S09626 MO SSSR					
			1976-124D	Kosmos-885 SS 2	ESO	S09897 MO SSSR					
			1976-124E	Kosmos-885 SS 3	ESO	S09901 MO SSSR					
			1976-124F	Kosmos-885 SS 4	ESO	S09914 MO SSSR					
			1976-124G	Kosmos-885 SS 5	ESO	S09915 MO SSSR					
			1976-124H	Kosmos-885 SS 6	ESO	S09916 MO SSSR					
			1976-124J	Kosmos-885 SS 7	ESO	S09917 MO SSSR					
			1976-124K	Kosmos-885 SS 8	ESO	S09918 MO SSSR					
			1976-124L	Kosmos-885 SS 9	ESO	S09919 MO SSSR					
			1976-124M	Kosmos-885 SS 10	ESO	S09920 MO SSSR					
			1976-124N	Kosmos-885 SS 11	ESO	S09922 MO SSSR					
			1976-124P	Kosmos-885 SS 12	ESO	S09923 MO SSSR					
			1976-124Q	Kosmos-885 SS 13	ESO	S09924 MO SSSR					
			1976-124R	Kosmos-885 SS 14	ESO	S09925 MO SSSR					
			1976-124S	Kosmos-885 SS 15	ESO	S09926 MO SSSR					
			1976-124T	Kosmos-885 SS 16	ESO	S09999 MO SSSR					
			1976-124U	Kosmos-885 SS 17	ESO	S10391 MO SSSR					
1976-125	1976 Dec 19 1819		1976-125A	OPS 5705	KH11-1 KENNAN	S09627 NRO/CIA	Titan IIID	23D-15	V	SLC4E	JG9602
1976-126	1976 Dec 27 1205?		1976-126A	Kosmos-886	IS	S09634 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1976-127	1976 Dec 28 0638		1976-127A	Molniya-3	Molniya-3 No. 17	S09635 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1976-128	1976 Dec 28 0750?		1976-128A	Kosmos-887	Parus	S09637 MO SSSR	Kosmos 11K65M	65072-415	NIIP-53	LC132/1	RAEX
1977-001	1977 Jan 6 0940?		1977-001A	Kosmos-888	Zenit-4MK	S09658 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1977-002	1977 Jan 6 2317		1977-002A	Meteor-2	Meteor-2	S09661 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1977-003	1977 Jan 20 0830?		1977-003A	Kosmos-889	Zenit-2M	S09735 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1977-004	1977 Jan 20 2005?		1977-004A	Kosmos-890	Tsiklon	S09737 MO SSSR	Kosmos 11K65M	53719-155	NIIP-53	LC132/1	RAEX
1977-005	1977 Jan 28 0049		1977-005A	NATO 3B	NATO 3B	S09785 NATO	Delta 2914	613/D128	CC	LC17A	KHR-1
1977-006	1977 Feb 2 1230?		1977-006A	Kosmos-891	Vektor	S09801 MO SSSR	Kosmos 11K65M	53746-306	NIIP-53	LC132/2	RAEX
1977-007	1977 Feb 6 0600:01		1977-007A	DSP F7	DSP 9	S09803 USAF	Titan IIIC	23C-5	CC	LC40	PH960801
1977-008	1977 Feb 7 1610		1977-008A	Soyuz-24	Soyuz 7K-T(A9) No. 66	S09804 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9703-47
1977-009	1977 Feb 9 1130?		1977-009A	Kosmos-892	Zenit-4MK	S09812 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-010	1977 Feb 11 1457?		1977-010A	Molniya-2	Molniya-2	S09829 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1977-011	1977 Feb 15 1100		1977-011A	Kosmos-893	GVM DS-U2-1K	S09833 MO SSSR	Kosmos 11K65M	53721-261	NIIP-53	LC132/2	AVMDS
1977-012	1977 Feb 19 0915		1977-012A	Tansei-3	MS-T3	S09841 ISAS	Mu-3H	M-3H-1	KASC	M	JCM
1977-013	1977 Feb 21 1720?		1977-013A	Parus	Parus	S09846 MO SSSR	Kosmos 11K65M	47182-428	NIIP-53	LC132/1	RAEX
1977-F01	1977 Feb 22		1977-F01	[Kosmos]	Zenit-4MK	F00759 MOM	Soyuz 11A511U	-	NIIP-5	LC31	AVMNLJ
1977-014	1977 Feb 23 0850		1977-014A	Kiku 2	ETS-2	S09852 NASDA	N-1	N-3(F)	TNSC	N	WWW-NASDA
1977-015	1977 Feb 26 2118?		1977-015A	Kosmos-895	Tselina-D	S09853 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1977-016	1977 Mar 3 1030?		1977-016A	Kosmos-896	Zenit-6	S09857 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-017	1977 Mar 10 1100?		1977-017A	Kosmos-897	Zenit-4MK	S09860 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-018	1977 Mar 10 2316		1977-018A	Palapa A2	Palapa A2	S09862 Perumtel	Delta 2914	612/D129	CC	LC17A	KHR-1
1977-019	1977 Mar 13 1841:10		1977-019A	OPS 4915	KH8-48 GAMBIT	S09863 NRO/USAF	Titan 24B	24B-19 (3B-54)	V	SLC4W	JG9602
			1977-019	SRV-1	SRV-1	A02177 NRO/USAF					
			1977-019	SRV-2	SRV-2	A02179 NRO/USAF					
1977-020	1977 Mar 17 0830?		1977-020A	Kosmos-898	Zenit-2M	S09871 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
			1977-020D	Kapsula Kosmosa-898	Nauka?	S09887 MOM					
1977-021	1977 Mar 24 1151?		1977-021A	Molniya-1	Molniya-1	S09880 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1977-022	1977 Mar 24 2211?		1977-022A	Kosmos-899	Tselina-O	S09883 MO SSSR	Kosmos 11K65M	53749-159	NIIP-53	LC132/2	RAEX
1977-023	1977 Mar 29 2300?		1977-023A	Kosmos-900	AUOS-Z-R-O Oval	S09898 MO SSSR	Kosmos 11K65M	53749-168	NIIP-53	LC132/2	RAEX
1977-024	1977 Apr 5 0205		1977-024A	Meteor	Meteor-MV	S09903 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1977-025	1977 Apr 5 1030		1977-025A	Kosmos-901	DS-Pl-I No. 18	S09905 MO SSSR	Kosmos 11K63	-	NIIP-53	LC133/1	AVMDS
1977-026	1977 Apr 7 0859?		1977-026A	Kosmos-902	Zenit-4MK	S09908 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-027	1977 Apr 11 0138		1977-027A	Kosmos-903	Oko	S09911 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1977-028	1977 Apr 20 0900?		1977-028A	Kosmos-904	Zenit-2M	S09930 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1977-029	1977 Apr 20 1015		1977-029A	Geos 1	Geos 1	S09931 ESA	Delta 2914	617/D130	CC	LC17B	MOR M-492-
302-77-01											
1977-030	1977 Apr 26 1445		1977-030A	Kosmos-905	Yantar'-2K No. 6	S09937 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
			1977-030	Spuskaemiy Kapsula	SpK	A02188 MOM					
			1977-030	Spuskaemiy Kapsula	SpK	A02190 MOM					
1977-031	1977 Apr 27 0330?		1977-031A	Kosmos-906	ER763-4	S09938 MO SSSR	Kosmos 11K65M	53731-287	GTsP-4	LC107/1	RAEX
1977-032	1977 Apr 28 0910		1977-032A	Molniya-3	Molniya-3 No. 19	S09941 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1977-033	1977 May 5 1400?		1977-033A	Kosmos-907	Zenit-4MK	S09944 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-034	1977 May 12 1426:58		1977-034A	DSCS II F-7	DSCS II C-7	S10000 USAF	Titan IIIC	23C-14	CC	LC40	PH960801
			1977-034B	DSCS II F-8	DSCS II C-8	S10001 USAF					
1977-035	1977 May 17 1010?		1977-035A	Kosmos-908	Zenit-4MK	S10007 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1977-036	1977 May 19 1630?		1977-036A	Kosmos-909	Lira	S10010 MO SSSR	Kosmos 11K65M	53791-156	NIIP-53	LC132/2	RAEX
1977-037	1977 May 23 1214?		1977-037A	Kosmos-910	IS	S10014 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1977-038	1977 May 23 1813:00		1977-038A	OPS 9751	CANYON 7	S10016 USAF/NSA	SLV-3A Agena D	5507A	CC	LC13	CCMOPS
1977-039	1977 May 25 1100?		1977-039A	Kosmos-911	Sfera	S10019 MO SSSR	Kosmos 11K65M	53799-163	NIIP-53	LC132/2	RAEX
1977-040	1977 May 26 0700		1977-040A	Kosmos-912	Fram	S10021 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1977-041	1977 May 26 2147:01		1977-041A	Intelsat IVA F4	Intelsat IVA F4	S10024 Intelsat	SLV-3D Centaur	AC-39	CC	LC36A	CCMOPS
1977-042	1977 May 30 2230?		1977-042A	Kosmos-913	Romb	S10028 MO SSSR	Kosmos 11K65M	53749-161	NIIP-53	LC132/1	RAEX
			1977-042C	Kosmos-913 SS 1	ESO	S10237 MO SSSR					
			1977-042D	Kosmos-913 SS 2	ESO	S10238 MO SSSR					
			1977-042E	Kosmos-913 SS 3	ESO	S10329 MO SSSR					
			1977-042F	Kosmos-913 SS 4	ESO	S10330 MO SSSR					
			1977-042G	Kosmos-913 SS 5	ESO	S10331 MO SSSR					
			1977-042H	Kosmos-913 SS 6	ESO	S10332 MO SSSR					



		1977-042J	Kosmos-913 SS 7	ESO	S10333 MO SSSR						
		1977-042K	Kosmos-913 SS 8	ESO	S10334 MO SSSR						
		1977-042L	Kosmos-913 SS 9	ESO	S10335 MO SSSR						
		1977-042M	Kosmos-913 SS 10	ESO	S10336 MO SSSR						
		1977-042N	Kosmos-913 SS 11	ESO	S10337 MO SSSR						
		1977-042P	Kosmos-913 SS 12	ESO	S10349 MO SSSR						
		1977-042Q	Kosmos-913 SS 13	ESO	S10350 MO SSSR						
		1977-042R	Kosmos-913 SS 14	ESO	S10418 MO SSSR						
		1977-042S	Kosmos-913 SS 15	ESO	S10487 MO SSSR						
		1977-042T	Kosmos-913 SS 16	ESO	S10488 MO SSSR						
		1977-042U	Kosmos-913 SS 17	ESO	S10494 MO SSSR						
		1977-042V	Kosmos-913 SS 18	ESO	S10495 MO SSSR						
		1977-042W	Kosmos-913 SS 19	ESO	S10496 MO SSSR						
		1977-042X	Kosmos-913 SS 20	ESO	S10497 MO SSSR						
1977-043	1977 May 31 0730?	1977-043A	Kosmos-914	Zenit-2M	S10030 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX
		1977-043E	Kapsula Kosmosa-914	Nauka	S10046 MOM						
1977-044	1977 Jun 5 0259:02	1977-044A	DMSP 5D F-2	DMSP 5D S-2	S10033 USAF	Thor DSV-2U			V	SLC10W	SAC7383
1977-045	1977 Jun 8 1400?	1977-045A	Kosmos-915	Zenit-4MK	S10038 MOM	Soyuz 11A511U	-	183	NIIP-53	-	RAEX
1977-046	1977 Jun 10 0800?	1977-046A	Kosmos-916	Orion	S10040 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-047	1977 Jun 16 0158	1977-047A	Kosmos-917	Oko	S10059 MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48
1977-048	1977 Jun 16 1051:00	1977-048A	GOES 2	GOES B	S10061 NOAA	Delta 2914	616/D131		CC	LC17B	CCMOPS
1977-049	1977 Jun 17 0330?	1977-049A	Signe 3	Signe 3	S10064 CNES	Kosmos 11K65M	47182-422		GTSP-4	LC107/1	RAEX
1977-050	1977 Jun 17 0723?	1977-050A	Kosmos-918	IS	S10065 MO SSSR	Tsiklon-2	-		NIIP-5	LC90	RAEX
1977-051	1977 Jun 18 1030	1977-051A	Kosmos-919	DS-Pl-I No. 19	S10070 MO SSSR	Kosmos 11K63	-		NIIP-53	LC133/1	AVMDS
1977-052	1977 Jun 22 0800?	1977-052A	Kosmos-920	Zenit-4MK	S10086 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX
1977-053	1977 Jun 23 0916	1977-053A	NTS 2	NTS 2	S10091 USAF/USN	Atlas F	65F		V	SLC3W	JCM
1977-054	1977 Jun 24 0541?	1977-054A	Molniya-1	Molniya-1	S10092 MOM	Molniya 8K78M	-		NIIP-5	-	RAEX
1977-055	1977 Jun 24 1030	1977-055A	Kosmos-921	GVM	S10095 MO SSSR	Tsiklon-3	-		NIIP-53	LC32/2	NK9713-71
1977-056	1977 Jun 27 1830	1977-056A	OPS 4800	KH9-13 HEXAGON	S10111 NRO/CIA	Titan IIID	23D-17		V	SLC4E	JG9602
		1977-056	SRV-1	SRV-1	A02157 NRO						
		1977-056	SRV-2	SRV-2	A02159 NRO						
		1977-056	SRV-3	SRV-3	A02161 NRO						
		1977-056	SRV-4	SRV-4	A02163 NRO						
1977-057	1977 Jun 29 1834	1977-057A	Meteor-Priroda	Meteor-Priroda No. 2-2	S10113 MOM	Vostok 8A92M	-		NIIP-5	LC31	NK9817-36
1977-058	1977 Jun 30 1400?	1977-058A	Kosmos-922	Zenit-2M	S10115 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-059	1977 Jul 1 1152?	1977-059A	Kosmos-923	Strela-2	S10120 MO SSSR	Kosmos 11K65M	53749-162		NIIP-53	LC132/1	RAEX
1977-060	1977 Jul 4 2220?	1977-060A	Kosmos-924	Tselina-O	S10129 MO SSSR	Kosmos 11K65M	53746-303		NIIP-53	LC132/2	RAEX
1977-061	1977 Jul 7 0725?	1977-061A	Kosmos-925	Tselina-D	S10134 MOM	Vostok 8A92M	-		NIIP-53	-	RAEX
1977-062	1977 Jul 8 1730?	1977-062A	Kosmos-926	Tsikada	S10137 MO SSSR	Kosmos 11K65M	53731-262		NIIP-53	LC132/1	RAEX
1977-063	1977 Jul 12 0900?	1977-063A	Kosmos-927	Zenit-4MKM	S10139 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-064	1977 Jul 13 0502?	1977-064A	Kosmos-928	Parus	S10141 MO SSSR	Kosmos 11K65M	53716-331		NIIP-53	LC132/1	RAEX
1977-065	1977 Jul 14 1039:00	1977-065A	Himawari	GMS	S10143 NASDA	Delta 2914	618/D132		CC	LC17B	CCMOPS
1977-066	1977 Jul 17 0900	1977-066A	Kosmos-929	TKS No. 16101	S10146 MOM	Proton-K	293-02		NIIP-5	LC81/24	NK9810-25
		1977-066	Kosmos-929 VA	TKS VA	A02213 MOM						
1977-067	1977 Jul 19 0840?	1977-067A	Kosmos-930	Vektor	S10149 MO SSSR	Kosmos 11K65M	53721-264		NIIP-53	LC132/2	RAEX
1977-068	1977 Jul 20 0444	1977-068A	Kosmos-931	Oko	S10150 MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48
1977-069	1977 Jul 20 0735?	1977-069A	Kosmos-932	Zenit-4MKM	S10153 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX
1977-070	1977 Jul 22 1000?	1977-070A	Kosmos-933	Vektor	S10157 MO SSSR	Kosmos 11K65M	53731-267		NIIP-53	LC132/1	RAEX
1977-071	1977 Jul 23 2115	1977-071A	Raduga	Gran' No. 13L	S10159 MOM	Proton-K/DM	291-01		NIIP-5	LC200/40	NK9810-25
1977-072	1977 Jul 27 1807?	1977-072A	Kosmos-934	Zenit-6	S10164 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-073	1977 Jul 29 0800?	1977-073A	Kosmos-935	Zenit-2M	S10168 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-074	1977 Aug 3 1401	1977-074A	Kosmos-936	Bion No. 4	S10172 MOM	Soyuz 11A511U	-		NIIP-53	LC43/3	NK96-26-34
1977-F02	1977 Aug 4 2200	1977-F02	[Kosmos]	TKS VA LVI-2 No. 009P/P	F00764 MOM	Proton-K	293-01		NIIP-5	LC81/24	NK9810-25
		1977-F02	[Kosmos]	TKS VA LVI-2 No. 009L/P	F00765 MOM						
		1977-F02	TKS GVM	TKS GVM	F00766 MOM						
		1977-F02	TKS VA cover	TKS GVM cover	F00767 MOM						
1977-F03	1977 Aug 10	1977-F03	[Kosmos]	Zenit-4MKM	F00771 MOM	Soyuz 11A511U	-		NIIP-5	LC31	AVMNLJ
1977-075	1977 Aug 12 0629:31	1977-075A	HEAO 1	HEAO A	S10217 NASA MSFC	SLV-3D Centaur	AC-45		CC	LC36B	CCMOPS
1977-076	1977 Aug 20 1429:44	1977-076A	Voyager 2	Voyager 2	S10271 NASA JPL	Titan IIIE	23E-7		CC	LC41	PH960801
1977-077	1977 Aug 24 0707?	1977-077A	Kosmos-937	US-P	S10278 MO SSSR	Tsiklon-2	-		NIIP-5	LC90	RAEX
1977-078	1977 Aug 24 1430?	1977-078A	Kosmos-938	Zenit-4MKM	S10281 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-079	1977 Aug 24 1820?	1977-079A	Kosmos-939	Strela-1M	S10282 MO SSSR	Kosmos 11K65M	53716-326		NIIP-53	LC132/1	RAEX
		1977-079B	Kosmos-940	Strela-1M	S10286 MO SSSR						
		1977-079C	Kosmos-941	Strela-1M	S10287 MO SSSR						
		1977-079D	Kosmos-942	Strela-1M	S10288 MO SSSR						
		1977-079E	Kosmos-943	Strela-1M	S10289 MO SSSR						
		1977-079F	Kosmos-944	Strela-1M	S10290 MO SSSR						
		1977-079G	Kosmos-945	Strela-1M	S10291 MO SSSR						
		1977-079H	Kosmos-946	Strela-1M	S10292 MO SSSR						
1977-080	1977 Aug 25 2349:59	1977-080A	Sirio 1	Sirio 1	S10294 CNR	Delta 2313	615/D133		CC	LC17B	CCMOPS
1977-081	1977 Aug 27 1009?	1977-081A	Kosmos-947	Zenit-2M	S10299 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-082	1977 Aug 30 1806?	1977-082A	Molniya-1	Molniya-1	S10315 MOM	Molniya 8K78M	-		NIIP-53	-	RAEX
1977-083	1977 Sep 2 0900	1977-083A	Kosmos-948	Fram	S10319 MOM	Soyuz 11A511U	-		NIIP-53	-	NK96-26-40
1977-084	1977 Sep 5 1256:01	1977-084A	Voyager 1	Voyager 1	S10321 NASA JPL	Titan IIIE	23E-6		CC	LC41	PH960801
1977-085	1977 Sep 6 1730	1977-085A	Kosmos-949	Yantar'-2K No. 7	S10326 MOM	Soyuz 11A511U	-		NIIP-53	-	NK9718-91
		1977-085	Spuskaemiy Kapsula	SpK	A02223 MOM						
		1977-085	Spuskaemiy Kapsula	SpK	A02233 MOM						
1977-086	1977 Sep 13 1510?	1977-086A	Kosmos-950	Zenit-2M	S10351 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1977-087	1977 Sep 13 1959?	1977-087A	Kosmos-951	Parus	S10352 MO SSSR	Kosmos 11K65M	65082-436		NIIP-53	LC132/1	RAEX
1977-F04	1977 Sep 13 2331:00	1977-F04	OTS 1	OTS 1	F00777 ESA	Delta 3914	619/D134		CC	LC17A	CCMOPS
1977-088	1977 Sep 16 1425?	1977-088B	Kosmos-952	US-A	S10399 MO SSSR	Tsiklon-2	-		NIIP-5	LC90	RAEX
1977-089	1977 Sep 16 1430?	1977-089A	Kosmos-953	Zenit-4MKM	S10359 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX

1977-090	1977 Sep 18	1348?	1977-090A	Kosmos-954	US-A	S10361 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1977-091	1977 Sep 20	0101?	1977-091A	Kosmos-955	Tselina-D	S10362 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1977-092	1977 Sep 20	1728	1977-092A	Ekran	Ekran No. 12L	S10365 MOM	Proton-K/DM	291-02	NIIP-5	LC200/40	NK9810-25
1977-093	1977 Sep 22	0051	1977-093A	Prognoz-6	SO-M No. 506	S10370 MOM	Molniya 8K78M	-	NIIP-5	LC31	JCM
1977-094	1977 Sep 23	1834	1977-094A	OPS 7471	KH8-49 GAMBIT	S10374 NRO/USAF	Titan 24B	24B-23 (3B-58)	V	SLC4W	JG9602
			1977-094	SRV-1	SRV-1	A02229 NRO/USAF					
			1977-094	SRV-2	SRV-2	A02231 NRO/USAF					
			1977-095A	Kosmos-956	GVM	S10375 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	RAEX
1977-095	1977 Sep 24	1015?	1977-095A	Kosmos-956	GVM	S10375 MO SSSR	Kosmos 11K65M	53731-278	NIIP-53	LC132/1	NK9521-43
1977-096	1977 Sep 24	1630	1977-096A	Interkosmos-17	AUOS-Z-R-IK	S10376 IK	Proton-K	295-01	NIIP-5	LC81/24	NK9810-25
1977-097	1977 Sep 29	0650:00	1977-097A	Saljut-6	DOS 5	S10382 MOM	SLV-3D Centaur	AC-43	CC	LC36A	CCMOPS
1977-F05	1977 Sep 30	0102:59	1977-F05	Intelsat IVA F5	Intelsat IVA F5	F00781 Intelsat	Soyuz 11A511U	-	NIIP-5	-	RAEX
1977-098	1977 Sep 30	0946?	1977-098A	Kosmos-957	Zenit-4MKM	S10385 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1977-099	1977 Oct 9	0240:35	1977-099A	Soyuz-25	Soyuz 7K-T No. 42	S10401 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1977-100	1977 Oct 11	1514?	1977-100A	Kosmos-958	Zenit-6	S10403 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-101	1977 Oct 21	1005?	1977-101A	Kosmos-959	Lira	S10419 MO SSSR	Kosmos 11K65M	53716-325	NIIP-53	LC132/1	RAEX
1977-102	1977 Oct 22	1353:00	1977-102A	ISEE 1	ISEE A	S10422 NASA GSFC	Delta 2914	623/D135	CC	LC17B	CCMOPS
			1977-102B	ISEE 2	ISEE B	S10423 ESA					
1977-103	1977 Oct 25	0525?	1977-103A	Kosmos-960	Tselina-O	S10430 MO SSSR	Kosmos 11K65M	53746-309	NIIP-53	LC132/1?	RAEX
1977-104	1977 Oct 26	0514?	1977-104A	Kosmos-961	IS	S10434 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1977-105	1977 Oct 28	0137	1977-105A	Molniya-3	Molniya-3 No. 18	S10455 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1977-106	1977 Oct 28	0452:04	1977-106A	Transat O-11	NNS O-11	S10457 USN	Scout D-1	S200C	V	SLC5	LAAFB
1977-107	1977 Oct 28	1600?	1977-107A	Kosmos-962	Tsiklon	S10459 MO SSSR	Kosmos 11K65M	53768-313	NIIP-53	LC132/1	RAEX
1977-108	1977 Nov 23	0135:00	1977-108A	Meteosat 1	Meteosat 1	S10489 ESA	Delta 2914	620/D136	CC	LC17A	CCMOPS
1977-109	1977 Nov 24	1430?	1977-109A	Kosmos-963	Sfera	S10491 MO SSSR	Kosmos 11K65M	53746-302	NIIP-53	LC132/1	RAEX
1977-F06	1977 Nov 29		1977-F06	-	Tsikada?	F00783 MO SSSR	Kosmos 11K65M	53721-265	NIIP-53	LC132/1	AVMNLJ
1977-110	1977 Dec 4	1200?	1977-110A	Kosmos-964	Zenit-4MKM	S10498 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-111	1977 Dec 8	1100?	1977-111A	Kosmos-965	Romb	S10501 MO SSSR	Kosmos 11K65M	65068-308	NIIP-53	LC132/2	RAEX
			1977-111C	Kosmos-965 SS 1	ESO	S10505 MO SSSR					
			1977-111D	Kosmos-965 SS 2	ESO	S10682 MO SSSR					
			1977-111E	Kosmos-965 SS 3	ESO	S10683 MO SSSR					
			1977-111F	Kosmos-965 SS 4	ESO	S10741 MO SSSR					
			1977-111G	Kosmos-965 SS 5	ESO	S10742 MO SSSR					
			1977-111H	Kosmos-965 SS 6	ESO	S10780 MO SSSR					
			1977-111J	Kosmos-965 SS 7	ESO	S10782 MO SSSR					
			1977-111K	Kosmos-965 SS 8	ESO	S10789 MO SSSR					
			1977-111L	Kosmos-965 SS 9	ESO	S10795 MO SSSR					
			1977-111M	Kosmos-965 SS 10	ESO	S10797 MO SSSR					
			1977-111N	Kosmos-965 SS 11	ESO	S10807 MO SSSR					
			1977-111P	Kosmos-965 SS 12	ESO	S10809 MO SSSR					
			1977-111Q	Kosmos-965 SS 13	ESO	S10814 MO SSSR					
			1977-111R	Kosmos-965 SS 14	ESO	S10815 MO SSSR					
			1977-111S	Kosmos-965 SS 15	ESO	S10816 MO SSSR					
			1977-111T	Kosmos-965 SS 16	ESO	S10817 MO SSSR					
			1977-111U	Kosmos-965 SS 17	ESO	S10858 MO SSSR					
			1977-111V	Kosmos-965 SS 18	ESO	S10859 MO SSSR					
			1977-111W	Kosmos-965 SS 19	ESO	S10891 MO SSSR					
			1977-111X	Kosmos-965 SS 20	ESO	S10892 MO SSSR					
			1977-111Y	Kosmos-965 SS 21	ESO	S10908 MO SSSR					
			1977-111AB	Kosmos-965 SS 22	ESO	S10923 MO SSSR					
			1977-111AC	Kosmos-965 SS 23	ESO	S10924 MO SSSR					
1977-112	1977 Dec 8	1745	1977-112A	OPS 8781	PARCAE 2	S10502 USN	Atlas F/MSD	50F	V	SLC3W	JG9602
			1977-112D	SS 1	SSU	S10529 USN					
			1977-112E	SS 2	SSU	S10544 USN					
			1977-112F	SS 3	SSU	S10594 USN					
1977-113	1977 Dec 10	0118:40	1977-113A	Soyuz-26	Soyuz 7K-T No. 43	S10506 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1977-114	1977 Dec 11	2245:01	1977-114A	OPS 4258	AQUACADE 3	S10508 NRO/CIA	SLV-3A Agena D	5504A	CC	LC13	CCMOPS
1977-115	1977 Dec 12	0940?	1977-115A	Kosmos-966	Zenit-2M	S10510 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
			1977-115D	Kapsula Kosmosa-966	Nauka	S10538 MOM					
1977-116	1977 Dec 13	1553?	1977-116A	Kosmos-967	Lira	S10512 MO SSSR	Kosmos 11K65M	53716-332	NIIP-53	LC132/1	RAEX
1977-117	1977 Dec 14	0930	1977-117A	Meteor-2	Meteor-2	S10514 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1977-118	1977 Dec 15	0047:03	1977-118A	Sakura	CS	S10516 NASDA	Delta 2914	624/D137	CC	LC17B	KHR-1
1977-119	1977 Dec 16	0425?	1977-119A	Kosmos-968	Strela-2	S10520 MO SSSR	Kosmos 11K65M	53746-305	NIIP-53	LC132/1	RAEX
1977-120	1977 Dec 20	1550?	1977-120A	Kosmos-969	Zenit-4MKM	S10527 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1977-121	1977 Dec 21	1035?	1977-121A	Kosmos-970	IS	S10531 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1977-122	1977 Dec 23	1624?	1977-122A	Kosmos-971	Parus	S10536 MO SSSR	Kosmos 11K65M	53716-322	NIIP-53	LC132/1	RAEX
1977-123	1977 Dec 27	0800?	1977-123A	Kosmos-972	GVM	S10539 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	RAEX
1977-124	1977 Dec 27	0920?	1977-124A	Kosmos-973	Zenit-2M	S10540 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
			1977-124D	Kapsula Kosmosa-973	Nauka	S10558 MOM					
1978-001	1978 Jan 6	1550?	1978-001A	Kosmos-974	Zenit-4MKM	S10554 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-002	1978 Jan 7	0015:00	1978-002A	Intelsat IVA F3	Intelsat IVA F3	S10557 Intelsat	SLV-3D Centaur	AC-46	CC	LC36B	CCMOPS
1978-003	1978 Jan 10	1226:00	1978-003A	Soyuz-27	Soyuz 7K-T No. 44	S10560 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1978-004	1978 Jan 10	1323?	1978-004A	Kosmos-975	Tselina-D	S10561 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1978-005	1978 Jan 10	2051?	1978-005A	Kosmos-976	Strela-1M	S10581 MO SSSR	Kosmos 11K65M	53716-319	NIIP-53	LC132/2	RAEX
			1978-005B	Kosmos-977	Strela-1M	S10584 MO SSSR					
			1978-005C	Kosmos-978	Strela-1M	S10585 MO SSSR					
			1978-005D	Kosmos-979	Strela-1M	S10586 MO SSSR					
			1978-005E	Kosmos-980	Strela-1M	S10587 MO SSSR					
			1978-005F	Kosmos-981	Strela-1M	S10588 MO SSSR					
			1978-005G	Kosmos-982	Strela-1M	S10589 MO SSSR					
			1978-005H	Kosmos-983	Strela-1M	S10590 MO SSSR					
1978-006	1978 Jan 13	1515?	1978-006A	Kosmos-984	Zenit-2M	S10592 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-007	1978 Jan 17	0326?	1978-007A	Kosmos-985	Parus	S10599 MO SSSR	Kosmos 11K65M	53716-327	NIIP-53	LC132/1	RAEX

1978-008	1978 Jan 20 0824:40	1978-008A	Progress-1	Progress 7K-TG No. 102	S10603 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1978-009	1978 Jan 24 0651	1978-009A	Molniya-3	Molniya-3 No. 20	S10605 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1978-010	1978 Jan 24 0950?	1978-010A	Kosmos-986	Zenit-4MKM	S10607 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-011	1978 Jan 26 0458	1978-011A	FSW	FSW	S10611 MAI	Chang Zheng 2C	CZ2C-3 (6)	JQ	LA2B	MTR-1
		1978-011	FSW RV	FSW RV	A02265 MAI					
1978-012	1978 Jan 26 1736:00	1978-012A	IUE	IUE	S10637 NASA/ESA/UK	Delta 2914	628/D138	CC	LC17A	KHR-1
1978-013	1978 Jan 31 1450?	1978-013A	Kosmos-987	Zenit-4MKM	S10639 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-014	1978 Feb 4 0700	1978-014A	Kyokko	EXOS-A	S10664 ISAS	Mu-3H	M-3H-2	KASC	M	JCM
1978-015	1978 Feb 8 1215?	1978-015A	Kosmos-988	Orion	S10666 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-016	1978 Feb 9 2117:01	1978-016A	FLTSATCOM F1	FLTSATCOM F1	S10669 USN	SLV-3D Centaur	AC-44	CC	LC36A	CCMOPS
1978-017	1978 Feb 14 0930?	1978-017A	Kosmos-989	Zenit-4MKM	S10672 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-018	1978 Feb 16 0400	1978-018A	Ume-2	ISS-b	S10674 NASDA	N-1	N-4 (F)	TNSC	N	WWV-NASDA
1978-019	1978 Feb 17 1633?	1978-019A	Kosmos-990	Strela-2	S10676 MO SSSR	Kosmos 11K65M	53746-312	NIIP-53	LC132/2	RAEX
1978-020	1978 Feb 22 2344?	1978-020A	Navstar 1	Navstar SVN 1	S10684 USAF	Atlas F/SVS	64F	V	SLC3E	RAE
1978-021	1978 Feb 25 0500?	1978-021A	OPS 6031	Jumpseat 5	S10688 USAF/NSA	Titan 34B	34B-2 (3B-49)	V	SLC4W	RAE
1978-022	1978 Feb 28 0643?	1978-022A	Kosmos-991	Parus	S10692 MO SSSR	Kosmos 11K65M	53716-323	NIIP-53	LC132/2	RAEX
1978-023	1978 Mar 2 1528:10	1978-023A	Soyuz-28	Soyuz 7K-T No. 45	S10694 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1978-024	1978 Mar 2 2207?	1978-024A	Molniya-1	Molniya-1	S10696 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1978-025	1978 Mar 4 0740?	1978-025A	Kosmos-992	Zenit-2M	S10699 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-026	1978 Mar 5 1754	1978-026A	Landsat 3	Landsat 3	S10702 NASA GSFC	Delta 2910	621/D139	V	SLC2W	KHR-1
		1978-026B	Amsat-Oscar-8	Oscar 8	S10703 AMSAT-NA					
		1978-026C	PIX	PIX	A02278 NASA LaRC					
1978-027	1978 Mar 10 1042?	1978-027A	Kosmos-993	Zenit-4MKM	S10725 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-028	1978 Mar 15 1557?	1978-028A	Kosmos-994	Tsiklon	S10731 MO SSSR	Kosmos 11K65M	53746-315	NIIP-53	LC132/2	RAEX
1978-029	1978 Mar 16 1843?	1978-029A	OPS 0460	KH9-14 HEXAGON	S10733 NRO/CIA	Titan IID	23D-20	V	SLC4E	RAE
		1978-029B	OPS 7858	SS D 2	S10734 USAF/NSA					
		1978-029	SRV-1	SRV-1	A02250 NRO					
		1978-029	SRV-2	SRV-2	A02252 NRO					
		1978-029	SRV-3	SRV-3	A02254 NRO					
		1978-029	SRV-4	SRV-4	A02256 NRO					
1978-030	1978 Mar 17 1050?	1978-030A	Kosmos-995	Zenit-2M	S10735 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-F01	1978 Mar 25 1809	1978-F01	DSCS II F-9	DSCS II C-9	F00785 USAF	Titan IIC	23C-17	CC	LC40	JCM
		1978-F01	DSCS II F-10	DSCS II C-10	F00786 USAF					
1978-031	1978 Mar 28 0130?	1978-031A	Kosmos-996	Parus	S10744 MO SSSR	Kosmos 11K65M	53746-314	NIIP-53	LC132/1	RAEX
1978-032	1978 Mar 30 0000	1978-032A	Kosmos-997	TKS VA	S10770 MOM	Proton-K	292-01	NIIP-5	LC81/24?	NK9810-25
		1978-032B	Kosmos-998	TKS VA	S10771 MOM					
		1978-032D	TKS GVM	TKS GVM	S10775 MOM					
		1978-032	TKS VA cover	TKS GVM cover	A02289 MOM					
1978-033	1978 Mar 30 0750?	1978-033A	Kosmos-999	Zenit-4MKM	S10773 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-034	1978 Mar 31 1401?	1978-034A	Kosmos-1000	Tsikada	S10776 MO SSSR	Kosmos 11K65M	53768-307	NIIP-53	LC132/1	RAEX
1978-035	1978 Mar 31 2336:01	1978-035A	Intelsat IVA F6	Intelsat IVA F6	S10778 Intelsat	SLV-3D Centaur	AC-48	CC	LC36B	CCMOPS
1978-036	1978 Apr 4 1500?	1978-036A	Kosmos-1001	Soyuz 7K-ST No. 4L	S10783 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-037	1978 Apr 6 0910?	1978-037A	Kosmos-1002	Zenit-2M	S10785 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-038	1978 Apr 7 0045:01	1978-038A	OPS 8790	AQUACADE 4	S10787 NRO/CIA	SLV-3A Agena D	5505A	CC	LC13	CCMOPS
1978-039	1978 Apr 7 2201:00	1978-039A	Yuri	BSE	S10792 NASDA	Delta 2914	626/D140	CC	LC17B	KHR-1
1978-040	1978 Apr 20 1530?	1978-040A	Kosmos-1003	Zenit-4MKM	S10811 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-041	1978 Apr 26 1020	1978-041A	HCMM	AEM-A	S10818 NASA GSFC	Scout D-1	S201C	V	SLC5	JG9602
1978-042	1978 May 1 0305:04	1978-042A	DMSP 5D F-3	DMSP 5D S-3	S10820 USAF	Thor DSV-2U	143	V	SLC10W	SAC7383
1978-043	1978 May 5 1530?	1978-043A	Kosmos-1004	Zenit-2M	S10846 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1978-043G	Kapsula Kosmosa-1004	Nauka	S10852 MOM					
1978-044	1978 May 11 2259:00	1978-044A	OTS 2	OTS 2	S10855 ESA	Delta 3914	627/D141	CC	LC17A	MOR M-492-
1978-045	1978 May 12 0407?	1978-045A	Kosmos-1005	Tselina-D	S10860 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1978-046	1978 May 12 1100?	1978-046A	Kosmos-1006	Vektor	S10862 MO SSSR	Kosmos 11K65M	53746-318	NIIP-53	LC132/1	RAEX
1978-047	1978 May 13 1034	1978-047A	Navstar 2	Navstar SVN 2	S10893 USAF	Atlas F/SVS	49F	V	SLC3E	JCM
1978-048	1978 May 16 1040?	1978-048A	Kosmos-1007	Zenit-4MKM	S10895 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-049	1978 May 17 1439?	1978-049A	Kosmos-1008	Tselina-O	S10898 MO SSSR	Kosmos 11K65M	53798-316	NIIP-53	LC132/1	RAEX
1978-050	1978 May 19 0021?	1978-050A	Kosmos-1009	IS	S10904 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1978-051	1978 May 20 1313:00	1978-051A	Pioneer Venus Orbiter	Pioneer Venus Orbiter	S10911 NASA ARC	SLV-3D Centaur	AC-50	CC	LC36A	CCMOPS
1978-052	1978 May 23 0730	1978-052A	Kosmos-1010	Fram	S10915 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1978-053	1978 May 23 1657?	1978-053A	Kosmos-1011	Parus	S10917 MO SSSR	Kosmos 11K65M	53768-310	NIIP-53	LC132/1?	RAEX
1978-054	1978 May 25 1430?	1978-054A	Kosmos-1012	Zenit-2M	S10919 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-F02	1978 May 27 0125:00	1978-F02	Ekran	Ekran No. 13L	F00792 MOM	Proton-K/DM	294-02	NIIP-5	LC200/40	NK9810-25
1978-055	1978 Jun 2 1212?	1978-055A	Molniya-1	Molniya-1	S10925 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1978-056	1978 Jun 7 2200?	1978-056A	Kosmos-1013	Strela-1M	S10930 MO SSSR	Kosmos 11K65M	53716-321	NIIP-53	LC132/1	RAEX
		1978-056B	Kosmos-1014	Strela-1M	S10931 MO SSSR					
		1978-056C	Kosmos-1015	Strela-1M	S10932 MO SSSR					
		1978-056D	Kosmos-1016	Strela-1M	S10933 MO SSSR					
		1978-056E	Kosmos-1017	Strela-1M	S10934 MO SSSR					
		1978-056F	Kosmos-1018	Strela-1M	S10935 MO SSSR					
		1978-056G	Kosmos-1019	Strela-1M	S10936 MO SSSR					
		1978-056H	Kosmos-1020	Strela-1M	S10937 MO SSSR					
1978-057	1978 Jun 10 0835?	1978-057A	Kosmos-1021	Zenit-4MKM	S10939 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-058	1978 Jun 10 1912?	1978-058A	OPS 9454	CHALET 1	S10941 USAF/NSA	Titan IIC	23C-15	CC	LC40	RAE
1978-059	1978 Jun 12 1030?	1978-059A	Kosmos-1022	Zenit-4MKM	S10944 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-060	1978 Jun 14 1828?	1978-060A	OPS 4515	KH11-2 KENNAN	S10947 NRO/CIA	Titan IID	23D-18	V	SLC4E	RAE
1978-061	1978 Jun 15 2016:45	1978-061A	Soyuz-29	Soyuz 7K-T No. 46	S10952 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1978-062	1978 Jun 16 1049	1978-062A	GOES 3	GOES C	S10953 NOAA	Delta 2914	625/D142	CC	LC17B	KHR-1
1978-063	1978 Jun 21 0927?	1978-063A	Kosmos-1023	Strela-2	S10961 MO SSSR	Kosmos 11K65M	53716-317	NIIP-53	LC132/1	RAEX
1978-064	1978 Jun 27 0112	1978-064A	Seasat 1	Seasat A	S10967 NASA/JPL	Atlas F/Agena D	23F	V	SLC3W	JCM
1978-065	1978 Jun 27 1527:21	1978-065A	Soyuz-30	Soyuz 7K-T(A9) No. 67	S10968 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1978-066	1978 Jun 28 0259	1978-066A	Kosmos-1024	Oko	S10970 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48

1978-067	1978 Jun 28 1735?	1978-067A	Kosmos-1025	GVM	S10973 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	RAEX
1978-068	1978 Jun 29 2224:59	1978-068A	Comstar D-3	Comstar D-3	S10975 Comsat	SLV-3D Centaur	AC-41	CC	LC36B	MOR M-491-
201-78-03										
1978-069	1978 Jul 2 0930?	1978-069A	Kosmos-1026	Energiya No. 2	S10977 MOM	Soyuz 11A511U	-	NIIP-5	LC31	RAEX
1978-070	1978 Jul 7 1126:16	1978-070A	Progress-2	Progress 7K-TG No. 101	S10979 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1978-071	1978 Jul 14 1043	1978-071A	Geos 2	Geos 2	S10981 ESA	Delta 2914	631/D143	CC	LC17A	MOR M-492-
302-78-02										
1978-072	1978 Jul 14 1500?	1978-072A	Molniya-1	Molniya-1	S10984 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1978-073	1978 Jul 18 2159	1978-073A	Raduga	Gran' No. 14L	S10987 MOM	Proton-K/DM	292-02	NIIP-5	LC200/40	NK9810-25
1978-074	1978 Jul 27 0449?	1978-074A	Kosmos-1027	Taiklon	S10991 MO SSSR	Kosmos 11K65M	53716-313	NIIP-53	LC132/2	RAEX
1978-075	1978 Aug 5 0500?	1978-075A	OPS 310	SDS 3	S10993 NRO/USAF	Titan 34B	34B-7 (3B-57)	V	SLC4W	RAE
1978-076	1978 Aug 5 1500	1978-076A	Kosmos-1028	Feniks No. 14	S10995 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1978-076	Spuskaemiy Kapsula	SpK	A02324 MOM					
		1978-076	Spuskaemiy Kapsula	SpK	A02326 MOM					
1978-077	1978 Aug 7 2231:22	1978-077A	Progress-3	Progress 7K-TG No. 103	S10999 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1978-078	1978 Aug 8 0733	1978-078A	Pioneer Venus Multiprobe	Pioneer Venus Multiprobe	S11001 NASA ARC	SLV-3D Centaur	AC-51	CC	LC36A	KHR-1
		1978-078D	Sounder Probe	Sounder Probe	S12103 NASA ARC					
		1978-078E	North Probe	North Probe	S12104 NASA ARC					
		1978-078F	Day Probe	Day Probe	S12105 NASA ARC					
		1978-078G	Night Probe	Night Probe	S12106 NASA ARC					
1978-079	1978 Aug 12 1512	1978-079A	ISEE 3	ISEE C	S11004 NASA GSFC	Delta 2914	633/D144	CC	LC17B	KHR-1
1978-F03	1978 Aug 17 2002:00	1978-F03	Ekran	Ekran No. 15L	F00798 MOM	Proton-K/DM	297-02	NIIP-5	LC200/40	NK9810-25
1978-080	1978 Aug 22 2347?	1978-080A	Molniya-1	Molniya-1	S11007 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1978-081	1978 Aug 26 1451:30	1978-081A	Soyuz-31	Soyuz 7K-T No. 47	S11010 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1978-082	1978 Aug 29 1500?	1978-082A	Kosmos-1029	Zenit-4MKM	S11012 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-083	1978 Sep 6 0304	1978-083A	Kosmos-1030	Oko	S11015 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1978-084	1978 Sep 9 0325:39	1978-084A	Venera-11	4V-1 No. 360	S11020 MOM	Proton-K/D-1	296-01	NIIP-5	LC81/23	NK9810-25
		1978-084C	SA Veneri-11	SA	S12027 MOM					
1978-085	1978 Sep 9 1500?	1978-085A	Kosmos-1031	Zenit-4MKM	S11022 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-086	1978 Sep 14 0225:13	1978-086A	Venera-12	4V-1 No. 361	S11025 MOM	Proton-K/D-1	296-02	NIIP-5	LC81/24	NK9810-25
		1978-086C	SA Veneri-12	SA	S12028 MOM					
1978-087	1978 Sep 16 0500?	1978-087A	Jikiken	KOS-B	S11027 ISAS	Mu-3H	M-3H-3	KASC	M	RAE
1978-088	1978 Sep 19 0805?	1978-088A	Kosmos-1032	Zenit-2M	S11029 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1978-088D	Kapsula Kosmosa-1032	Nauka	S11038 MOM					
1978-089	1978 Oct 3 1100	1978-089A	Kosmos-1033	Fram	S11039 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1978-090	1978 Oct 3 2309:30	1978-090A	Progress-4	Progress 7K-TG No. 105	S11040 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1978-091	1978 Oct 4 0349?	1978-091A	Kosmos-1034	Strela-1M	S11042 MO SSSR	Kosmos 11K65M	53782-429	NIIP-53	LC132/1	RAEX
		1978-091B	Kosmos-1035	Strela-1M	S11044 MO SSSR					
		1978-091C	Kosmos-1036	Strela-1M	S11045 MO SSSR					
		1978-091D	Kosmos-1037	Strela-1M	S11046 MO SSSR					
		1978-091E	Kosmos-1038	Strela-1M	S11047 MO SSSR					
		1978-091F	Kosmos-1039	Strela-1M	S11048 MO SSSR					
		1978-091G	Kosmos-1040	Strela-1M	S11049 MO SSSR					
		1978-091H	Kosmos-1041	Strela-1M	S11050 MO SSSR					
1978-092	1978 Oct 6 1530?	1978-092A	Kosmos-1042	Zenit-4MKM	S11052 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-093	1978 Oct 7 0028?	1978-093A	Navstar 3	Navstar SVN 3	S11054 USAF	Atlas F/SVS	47F	V	SLC3E	RAE
1978-094	1978 Oct 10 1944?	1978-094A	Kosmos-1043	Tselina-D	S11055 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1978-095	1978 Oct 13 0519	1978-095A	Molniya-3	Molniya-3 No. 22	S11057 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1978-096	1978 Oct 13 1123	1978-096A	Tiros-N	Tiros-N	S11060 NASA GSFC	Atlas F	29F	V	SLC3W	POES-WWW
1978-097	1978 Oct 17 1500?	1978-097A	Kosmos-1044	Zenit-2M	S11065 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-F04	1978 Oct 17 1604:00	1978-F04	Ekran	Ekran No. 14L	F00804 MOM	Proton-K/DM	298-01	NIIP-5	LC200/40	NK9810-25
1978-098	1978 Oct 24 0815	1978-098A	Nimbus 7	Nimbus G	S11080 NASA GSFC	Delta 2910	630/D145	V	SLC2W	KHR-1
		1978-098B	CAMEO		A02343 NASA GSFC					
1978-099	1978 Oct 24 1900	1978-099A	Interkosmos-18	AUOS-Z Mag-1K	S11082 IK	Kosmos 11K65M	65055-106	NIIP-53	LC132/1	NK9521-43
		1978-099C	Magion	S2 Magion	S11110 CSSR					
1978-100	1978 Oct 26 0700?	1978-100A	Kosmos-1045	Meteor-2 GVM	S11084 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	RAEX
		1978-100B	RS-1	RS-1	S11085 MO SSSR					
		1978-100C	RS-2	RS-2	S11086 MO SSSR					
1978-101	1978 Oct 30 0523	1978-101A	Prognoz-7	SO-M No. 507	S11088 MOM	Molniya 8K78M	-	NIIP-5	LC31	JCM
1978-102	1978 Nov 1 1200?	1978-102A	Kosmos-1046	Orion	S11098 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-103	1978 Nov 13 0524	1978-103A	Einstein Observatory	HEAO B	S11101 NASA MSFC	SLV-3D Centaur	AC-52	CC	LC36B	KHR-1
1978-104	1978 Nov 15 1145?	1978-104A	Kosmos-1047	Zenit-4MKM	S11108 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-105	1978 Nov 16 2145?	1978-105A	Kosmos-1048	Strela-2	S11111 MO SSSR	Kosmos 11K65M	53755-111	NIIP-53	LC132/2	RAEX
1978-106	1978 Nov 19 0046	1978-106A	NATO 3C	NATO 3C	S11115 NATO	Delta 2914	634/D146	CC	LC17B	KHR-1
1978-107	1978 Nov 21 1200?	1978-107A	Kosmos-1049	Zenit-4MKM	S11118 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-108	1978 Nov 28 1620?	1978-108A	Kosmos-1050	Zenit-6	S11121 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-109	1978 Dec 5 1812?	1978-109A	Kosmos-1051	Strela-1M	S11128 MO SSSR	Kosmos 11K65M	53716-320	NIIP-53	LC132/2	RAEX
		1978-109B	Kosmos-1052	Strela-1M	S11129 MO SSSR					
		1978-109C	Kosmos-1053	Strela-1M	S11130 MO SSSR					
		1978-109D	Kosmos-1054	Strela-1M	S11131 MO SSSR					
		1978-109E	Kosmos-1055	Strela-1M	S11132 MO SSSR					
		1978-109F	Kosmos-1056	Strela-1M	S11133 MO SSSR					
		1978-109G	Kosmos-1057	Strela-1M	S11134 MO SSSR					
		1978-109H	Kosmos-1058	Strela-1M	S11135 MO SSSR					
1978-110	1978 Dec 7 1530?	1978-110A	Kosmos-1059	Zenit-4MKM	S11137 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-111	1978 Dec 8 0930?	1978-111A	Kosmos-1060	Zenit-2M	S11139 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1978-112	1978 Dec 11 0359	1978-112A	Navstar 4	Navstar SVN 4	S11141 USAF	Atlas F/SVS	39F	V	SLC3E	JCM
1978-113	1978 Dec 14 0043	1978-113A	DSCS II F-11	DSCS II C-11	S11144 USAF	Titan IIC	23C-18	CC	LC40	JCM
		1978-113B	DSCS II F-12	DSCS II C-12	S11145 USAF					
1978-114	1978 Dec 14 1520?	1978-114A	Kosmos-1061	Zenit-2M	S11148 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1978-114C	Kapsula Kosmosa-1061	Nauka	S11167 MOM					
1978-115	1978 Dec 15 1319?	1978-115A	Kosmos-1062	Tselina-O	S11150 MO SSSR	Kosmos 11K65M	53782-408	NIIP-53	LC132/2	RAEX



1978-116	1978 Dec 16 0021	1978-116A 1978-116B	Anik B DRIMS	Anik B DRIMS	S11153 Telesat A02367 NASA GSFC	Delta 3914	632/D147	CC	LC17A	KHR-1
1978-117	1978 Dec 19 0135?	1978-117A	Kosmos-1063	Tselina-D	S11155 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1978-118	1978 Dec 19 1215	1978-118A	Gorizont	Gorizont No. 11L	S11158 MOM	Proton-K/DM	295-02	NIIP-5	LC200/40	NK9602-24
1978-119	1978 Dec 20 2043?	1978-119A	Kosmos-1064	Parus	S11161 MO SSSR	Kosmos 11K65M	47182-425	NIIP-53	LC132/1	RAEX
1978-120	1978 Dec 22 2200?	1978-120A 1978-120C 1978-120D 1978-120E 1978-120F 1978-120G 1978-120H	Kosmos-1065 Kosmos-1065 SS 1 Kosmos-1065 SS 2 Kosmos-1065 SS 3 Kosmos-1065 SS 4 Kosmos-1065 SS 5 Kosmos-1065 SS 6	Romb ESO ESO ESO ESO ESO ESO	S11163 MO SSR S11243 MO SSSR S11244 MO SSSR S11248 MO SSSR S11249 MO SSSR S11424 MO SSSR S11426 MO SSSR	Kosmos 11K65M	65068-305	GTSP-4	LC107/1	RAEX
1978-121	1978 Dec 23 0839?	1978-121A	Kosmos-1066	Astrofizika 11F653 No. 1	S11165 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1978-122	1978 Dec 26 1330?	1978-122A	Kosmos-1067	Sfera	S11168 MO SSSR	Kosmos 11K65M	53782-430	NIIP-53	LC132/2	RAEX
1978-123	1978 Dec 26 1530?	1978-123A	Kosmos-1068	Zenit-4MKM	S11169 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1978-124	1978 Dec 28 1630?	1978-124A	Kosmos-1069	Orion	S11173 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-001	1979 Jan 11 1500?	1979-001A 1979-001F	Kosmos-1070 Kapsula Kosmosa-1070	Zenit-2M Nauka	S11229 MOM S11245 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-002	1979 Jan 13 1530?	1979-002A	Kosmos-1071	Zenit-4MKM	S11233 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-003	1979 Jan 16 1737?	1979-003A	Kosmos-1072	Parus	S11238 MO SSSR	Kosmos 11K65M	47182-437	NIIP-53	LC132/1	RAEX
1979-004	1979 Jan 18 1542	1979-004A	Molniya-3	Molniya-3 No. 23	S11240 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1979-005	1979 Jan 25 0543	1979-005A	Meteor-Priroda	Meteor-Priroda No. 2-3	S11251 MOM	Vostok 8A92M	-	NIIP-5	-	NK9817-36
1979-006	1979 Jan 30 1515?	1979-006A	Kosmos-1073	Zenit-4MKM	S11255 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-007	1979 Jan 30 2142	1979-007A	SCATHA	P78-2	S11256 USAF	Delta 2914	629/D148	CC	LC17B	KHR-1
1979-008	1979 Jan 31 0900?	1979-008A	Kosmos-1074	Soyuz 7K-ST No. 5L	S11259 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1979-009	1979 Feb 6 0846	1979-009A	Ayame	ECS	S11261 NASDA	N-1	N-5(F)	TNSC	N	WWV-NASDA
1979-010	1979 Feb 8 1000?	1979-010A	Kosmos-1075	Vektor	S11262 MO SSSR	Kosmos 11K65M	53782-417	NIIP-53	LC132/2	RAEX
1979-011	1979 Feb 12 1300	1979-011A	Kosmos-1076	Okean-E 1	S11266 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	NK9422-49
1979-012	1979 Feb 13 2141?	1979-012A	Kosmos-1077	Tselina-D	S11268 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1979-F01	1979 Feb 16	1979-F01	[Kosmos] [Nauka]	Zenit-2M Nauka	F00806 MOM F00808 MOM	Soyuz 11A511U	-	NIIP-53	-	AVNNLJ
1979-013	1979 Feb 18 1618	1979-013A	SAGE	AEM-B	S11270 NASA GSFC	Scout D-1	S202C	WI	LA3A	SP-4024
1979-014	1979 Feb 21 0500	1979-014A	Hakucho	CORSA-b	S11272 ISAS	Mu-3C	M-3C-4	KASC	M	JCM
1979-015	1979 Feb 21 0749	1979-015A	Ekran	KRAN No. 16L	S11273 MOM	Proton-K/DM	294-01	NIIP-5	LC200/40	NK9810-25
1979-016	1979 Feb 22 1210?	1979-016A	Kosmos-1078	Zenit-4MKM	S11276 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-017	1979 Feb 24 0824?	1979-017A	P78-1	P78-1	S11278 USN	Atlas F/OIS	27F	V	SLC3W	RAE
1979-018	1979 Feb 25 1153:49	1979-018A	Soyuz-32	Soyuz 7K-T No. 48	S11281 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1979-019	1979 Feb 27 1500	1979-019A 1979-019	Kosmos-1079 Spuskaemiy Kapsula Spuskaemiy Kapsula	Peniks No. 15 SpK SpK	S11283 MOM A02395 MOM A02397 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
1979-020	1979 Feb 27 1700	1979-020A	Interkosmos-19	AUOS-Z Ionozond-1K	S11285 IK	Kosmos 11K65M	47155-107	NIIP-53	LC132/2	NK9521-43
1979-021	1979 Mar 1 1845	1979-021A	Meteor-2	Meteor-2	S11288 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1979-022	1979 Mar 12 0547:28	1979-022A	Progress-5	Progress 7K-TG No. 104	S11292 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1979-023	1979 Mar 14 1050?	1979-023A	Kosmos-1080	Zenit-4MKM	S11294 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-024	1979 Mar 15 0258?	1979-024A 1979-024B 1979-024C 1979-024D 1979-024E 1979-024F 1979-024G 1979-024H	Kosmos-1081 Kosmos-1082 Kosmos-1083 Kosmos-1084 Kosmos-1085 Kosmos-1086 Kosmos-1087 Kosmos-1088	Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M	S11296 MO SSSR S11297 MO SSSR S11298 MO SSSR S11299 MO SSSR S11300 MO SSSR S11301 MO SSSR S11302 MO SSSR S11303 MO SSSR	Kosmos 11K65M	47168-312	NIIP-53	LC132/2	RAEX
1979-025	1979 Mar 16 1830	1979-025A 1979-025B 1979-025 1979-025 1979-025 1979-025 1979-025	OPS 3854 OPS 6675 SRV-1 SRV-2 SRV-3 SRV-4	KH9-15 HEXAGON SS D 3 SRV-1 SRV-2 SRV-3 SRV-4	S11305 NRO/CIA S11306 USAF/NSA A02377 NRO A02379 NRO A02381 NRO A02383 NRO	Titan IID	23D-21	V	SLC4E	JCM
1979-026	1979 Mar 21 0413?	1979-026A	Kosmos-1089	Parus	S11308 MO SSSR	Kosmos 11K65M	47172-413	NIIP-53	LC132/2	RAEX
1979-027	1979 Mar 31 1045?	1979-027A	Kosmos-1090	Zenit-2M	S11313 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-028	1979 Apr 7 0620?	1979-028A	Kosmos-1091	Parus	S11320 MO SSSR	Kosmos 11K65M	65082-424	NIIP-53	LC132/1	RAEX
1979-029	1979 Apr 10 1734:34	1979-029A	Soyuz-33	Soyuz 7K-T No. 49	S11324 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1979-030	1979 Apr 11 2151?	1979-030A	Kosmos-1092	Tsikada	S11326 MO SSSR	Kosmos 11K65M	53782-423	NIIP-53	LC132/1	RAEX
1979-031	1979 Apr 12 0028?	1979-031A	Molniya-1	Molniya-1	S11328 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1979-032	1979 Apr 14 0527?	1979-032A	Kosmos-1093	Tselina-D	S11331 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1979-033	1979 Apr 18 1200?	1979-033A	Kosmos-1094	US-P	S11333 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1979-034	1979 Apr 20 1130?	1979-034A	Kosmos-1095	Zenit-6	S11335 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-035	1979 Apr 25 0344	1979-035A	Raduga	Gran' No. 15L	S11343 MOM	Proton-K/DM	298-02	NIIP-5	LC200/40	NK9810-25
1979-036	1979 Apr 25 1000?	1979-036A	Kosmos-1096	US-P	S11346 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1979-037	1979 Apr 27 1715	1979-037A 1979-037 1979-037	Kosmos-1097 Spuskaemiy Kapsula Spuskaemiy Kapsula	Yantar'-4K1 No. 1 SpK SpK	S11348 MOM A02415 MOM A02419 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
1979-038	1979 May 4 1856	1979-038A	FLTSATCOM F2	FLTSATCOM F2	S11353 USN	SLV-3D Centaur	AC-47	CC	LC36A	KHR-1
1979-039	1979 May 13 0417:10	1979-039A	Progress-6	Progress 7K-TG No. 106	S11356 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1979-040	1979 May 15 1140?	1979-040A	Kosmos-1098	Zenit-4MKM	S11358 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-041	1979 May 17 0710	1979-041A	Kosmos-1099	Fram	S11360 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1979-042	1979 May 22 2300	1979-042A 1979-042B 1979-042D 1979-042E	Kosmos-1100 Kosmos-1101 TKS GVM TKS VA cover	TKS VA No. 102 TKS VA No. 102 TKS GVM TKS GVM cover	S11362 MOM S11363 MOM S11365 MOM S11366 MOM	Proton-K	300-02	NIIP-5	LC81/24	NK9810-25
1979-043	1979 May 25 0700	1979-043A 1979-043D	Kosmos-1102 Kapsula Kosmosa-1102	Gektor-Priroda Nauka	S11368 MOM S11390 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40

1979-044	1979 May 28 1814	1979-044A	OPS 7164	KH8-50 GAMBIT	S11372 NRO/USAF	Titan 24B	24B-25 (3B-61)	V	SLC4W	JCM
		1979-044	SRV-1	SRV-1	A02427 NRO/USAF					
		1979-044	SRV-2	SRV-2	A02429 NRO/USAF					
1979-045	1979 May 31 1630?	1979-045A	Kosmos-1103	Zenit-6	S11376 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-046	1979 May 31 1758?	1979-046A	Kosmos-1104	Parus	S11378 MO SSSR	Kosmos 11K65M	65082-418	NIIP-53	LC132/1	RAEX
1979-047	1979 Jun 2 2326	1979-047A	Ariel 6	Ariel 6	S11382 UK SRC	Scout D-1	S198C	WI	LA3A	SP-4024
1979-048	1979 Jun 5 2328	1979-048A	Molniya-3	Molniya-3 No. 21	S11384 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1979-049	1979 Jun 6 1812:41	1979-049A	Soyuz-34	Soyuz 7K-T No. 50	S11387 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1979-050	1979 Jun 6 1822:12	1979-050A	DMSF 5D F-4	DMSF 5D S-5	S11389 USAF	Thor DSV-2U	264	V	SLC10W	SAC7383
1979-051	1979 Jun 7 1030	1979-051A	Bhaskara	SEO	S11392 ISRO	Kosmos 11K65M	65055-109	GTsP-4	LC107/1	JCM
1979-052	1979 Jun 8 0710	1979-052A	Kosmos-1105	Fram	S11394 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1979-053	1979 Jun 10 1339	1979-053A	DSP F8	DSP 11	S11397 USAF	Titan IIIC	23C-13	CC	LC40	JCM
1979-054	1979 Jun 12 0700	1979-054A	Kosmos-1106	Gektor-Priroda	S11399 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
		1979-054D	Kapsula Kosmosa-1106	Nauka?	S11415 MOM					
1979-055	1979 Jun 15 1050?	1979-055A	Kosmos-1107	Zenit-6	S11404 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-056	1979 Jun 22 0700	1979-056A	Kosmos-1108	Fram	S11413 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1979-057	1979 Jun 27 1551:59	1979-057A	NOAA 6	NOAA A	S11416 NOAA	Atlas F	25F	V	SLC3W	POES-WWW
1979-058	1979 Jun 27 1811	1979-058A	Kosmos-1109	Oko	S11417 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1979-059	1979 Jun 28 0925:11	1979-059A	Progress-7	Progress 7K-TG No. 107	S11421 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
		1977-097BD	KRT-10	KRT-10	S11493 MOM					
1979-060	1979 Jun 28 2009?	1979-060A	Kosmos-1110	Strela-2	S11425 MO SSSR	Kosmos 11K65M	53768-304	NIIP-53	LC132/1	RAEX
1979-061	1979 Jun 29 1600?	1979-061A	Kosmos-1111	Zenit-6	S11429 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-062	1979 Jul 5 2319	1979-062A	Gorizont	Gorizont No. 12L	S11440 MOM	Proton-K/DM	299-01	NIIP-5	LC200/40	NK9602-24
1979-063	1979 Jul 6 0820?	1979-063A	Kosmos-1112	Romb	S11443 MO SSSR	Kosmos 11K65M	65075-124	GTsP-4	LC107/1	RAEX
		1979-063C	Kosmos-1112 SS 1	ESO	S11445 MO SSSR					
		1979-063D	Kosmos-1112 SS 2	ESO	S11446 MO SSSR					
		1979-063E	Kosmos-1112 SS 3	ESO	S11514 MO SSSR					
		1979-063F	Kosmos-1112 SS 4	ESO	S11535 MO SSSR					
		1979-063G	Kosmos-1112 SS 5	ESO	S11557 MO SSSR					
		1979-063H	Kosmos-1112 SS 6	ESO	S11583 MO SSSR					
		1979-063J	Kosmos-1112 SS 7	ESO	S11584 MO SSSR					
		1979-063K	Kosmos-1112 SS 8	ESO	S11594 MO SSSR					
		1979-063L	Kosmos-1112 SS 9	ESO	S11595 MO SSSR					
		1979-063M	Kosmos-1112 SS 10	ESO	S11596 MO SSSR					
		1979-063N	Kosmos-1112 SS 11	ESO	S11597 MO SSSR					
		1979-063P	Kosmos-1112 SS 12	ESO	S11598 MO SSSR					
		1979-063Q	Kosmos-1112 SS 13	ESO	S11599 MO SSSR					
		1979-063R	Kosmos-1112 SS 14	ESO	S11603 MO SSSR					
		1979-063S	Kosmos-1112 SS 15	ESO	S11617 MO SSSR					
		1979-063T	Kosmos-1112 SS 16	ESO	S11618 MO SSSR					
		1979-063U	Kosmos-1112 SS 17	ESO	S11619 MO SSSR					
		1979-063V	Kosmos-1112 SS 18	ESO	S11620 MO SSSR					
		1979-063W	Kosmos-1112 SS 19	ESO	S11625 MO SSSR					
		1979-063X	Kosmos-1112 SS 20	ESO	S11626 MO SSSR					
		1979-063Y	Kosmos-1112 SS 21	ESO	S11627 MO SSSR					
		1979-063Z	Kosmos-1112 SS 22	ESO	S11628 MO SSSR					
		1979-063AA	Kosmos-1112 SS 23	ESO	S11643 MO SSSR					
		1979-063AB	Kosmos-1112 SS 24	ESO	S11644 MO SSSR					
1979-064	1979 Jul 10 0900?	1979-064A	Kosmos-1113	Zenit-4MKM	S11447 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1979-065	1979 Jul 11 1541?	1979-065A	Kosmos-1114	Tselina-O	S11449 MO SSSR	Kosmos 11K65M	47155-104	NIIP-53	LC132/1	RAEX
1979-066	1979 Jul 13 0825	1979-066A	Kosmos-1115	Fram	S11451 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1979-067	1979 Jul 20 1158?	1979-067A	Kosmos-1116	Tselina-D	S11457 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1979-068	1979 Jul 25 1520?	1979-068A	Kosmos-1117	Zenit-4MKM	S11463 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-069	1979 Jul 27 0730	1979-069A	Kosmos-1118	Gektor-Priroda	S11465 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1979-F02	1979 Jul 28	1979-F02	SJ	SKW	F00810 MAI	Feng Bao 1	FBI-10	JQ	LA2B	JCM
1979-070	1979 Jul 31 0356?	1979-070A	Molniya-1	Molniya-1	S11474 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1979-071	1979 Aug 3 1045?	1979-071A	Kosmos-1119	Orion	S11478 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-F03	1979 Aug 10	1979-F03	Rohini RS-1	Rohini RS-1	F01230 ISRO	SLV-3	SLV-3-B1	SHAR	SLV	SP-4024
1979-072	1979 Aug 10 0020	1979-072A	Westar 3	Westar 3	S11484 WUTC	Delta 2914	638/D149	CC	LC17A	KHR-1
1979-073	1979 Aug 11 0915?	1979-073A	Kosmos-1120	Zenit-4MKM	S11485 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1979-074	1979 Aug 14 1530	1979-074A	Kosmos-1121	Feniks No. 929	S11487 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1979-074	Spuskaemiy Kapsula	SpK	A02458 MOM					
		1979-074	Spuskaemiy Kapsula	SpK	A02462 MOM					
1979-075	1979 Aug 17 0745	1979-075A	Kosmos-1122	Gektor-Priroda	S11491 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
		1979-075	Kapsula Kosmosa-1122	Nauka	A02460 MOM					
1979-076	1979 Aug 21 1110	1979-076A	Kosmos-1123	Fram	S11496 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1979-077	1979 Aug 28 0017	1979-077A	Kosmos-1124	Oko	S11509 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1979-078	1979 Aug 28 0055?	1979-078A	Kosmos-1125	Strela-2	S11510 MO SSSR	Kosmos 11K65M	47182-419	NIIP-53	LC132/1	RAEX
1979-079	1979 Aug 31 1130?	1979-079A	Kosmos-1126	Zenit-6	S11515 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-080	1979 Sep 5 1020	1979-080A	Kosmos-1127	Resurs-F1 17F41 No. 11	S11520 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1979-081	1979 Sep 14 1530?	1979-081A	Kosmos-1128	Zenit-4MKM	S11529 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-082	1979 Sep 20 0527	1979-082A	HEAO 3	HEAO C	S11532 NASA	SLV-3D Centaur	AC-53	CC	LC36B	KHR-1
1979-083	1979 Sep 25 1530	1979-083A	Kosmos-1129	Bion No. 5	S11536 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-34
1979-084	1979 Sep 25 2100?	1979-084A	Kosmos-1130	Strela-1M	S11538 MO SSSR	Kosmos 11K65M	47147-243	NIIP-53	LC132/2	RAEX
		1979-084B	Kosmos-1131	Strela-1M	S11539 MO SSSR					
		1979-084C	Kosmos-1132	Strela-1M	S11540 MO SSSR					
		1979-084D	Kosmos-1133	Strela-1M	S11541 MO SSSR					
		1979-084E	Kosmos-1134	Strela-1M	S11542 MO SSSR					
		1979-084F	Kosmos-1135	Strela-1M	S11543 MO SSSR					
		1979-084G	Kosmos-1136	Strela-1M	S11544 MO SSSR					
		1979-084H	Kosmos-1137	Strela-1M	S11545 MO SSSR					
1979-085	1979 Sep 28 1220?	1979-085A	Kosmos-1138	Zenit-6	S11548 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX

1979-086	1979 Oct 1 1122	1979-086A	OPS 1948	CHALET 2	S11558 USAF/NSA	Titan IIIC	23C-16	CC	LC40	JCM
1979-087	1979 Oct 3 1712	1979-087A	Ekran	Ekran No. 17L	S11561 MOM	Proton-K/DM	302-02	NIIP-5	LC200/40	NK9810-25
1979-088	1979 Oct 5 1130?	1979-088A	Kosmos-1139	Orion	S11564 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-089	1979 Oct 11 1636?	1979-089A	Kosmos-1140	Strela-2	S11573 MO SSSR	Kosmos 11K65M	47172-407	NIIP-53	LC132/2	RAEX
1979-F04	1979 Oct 12	1979-F04	[Kosmos]	Zenit-6	F00812 MOM	Soyuz 11A511U	-	NIIP-53	-	AVMNLJ
1979-090	1979 Oct 16 1217?	1979-090A	Kosmos-1141	Parus	S11585 MO SSSR	Kosmos 11K65M	47172-410	NIIP-53	LC132/2	RAEX
1979-091	1979 Oct 20 0703?	1979-091A	Molniya-1	Molniya-1	S11589 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1979-092	1979 Oct 22 1230?	1979-092A	Kosmos-1142	Zenit-6	S11592 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-093	1979 Oct 26 1812?	1979-093A	Kosmos-1143	Tselina-D	S11600 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1979-094	1979 Oct 30 1416	1979-094A	Magsat	AEM-C	S11604 NASA GSFC	Scout G-1	S203C	V	SLC5	APL-TD1-3
1979-095	1979 Oct 31 0925	1979-095A	Meteor-2	Meteor-2	S11605 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1979-096	1979 Nov 1 0805	1979-096A	Interkosmos-20	AUOS-Z ?	S11609 IK	Kosmos 11K65M	53755-105	NIIP-53	LC132/2	NK9521-43
1979-097	1979 Nov 2 1600	1979-097A	Kosmos-1144	Feniks No. 939	S11611 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1979-097	Spuskaemiy Kapsula	SpK	A02479 MOM					
		1979-097	Spuskaemiy Kapsula	SpK	A02481 MOM					
1979-098	1979 Nov 21 2136	1979-098A	DSCS II F-13	DSCS II D-13	S11621 USAF	Titan IIIC	23C-19	CC	LC40	JCM
		1979-098B	DSCS II F-14	DSCS II D-14	S11622 USAF					
		1979-099A	Kosmos-1145	Tselina-D	S11629 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1979-099	1979 Nov 27 0955?	1979-100A	Kosmos-1146	Yug	S11632 MO SSSR	Kosmos 11K65M	47168-309	NIIP-53	LC132/2	RAEX
1979-100	1979 Dec 5 0900?	1979-101A	Satcom 3	RCA-C	S11635 RCA Americom	Delta 3914	622/D150	CC	LC17A	KHR-1
1979-101	1979 Dec 7 0135	1979-102A	Kosmos-1147	Zenit-6	S11638 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-102	1979 Dec 12 1230?	1979-103A	Soyuz T	Soyuz 7K-ST No. 6L	S11640 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1979-103	1979 Dec 16 1230	1979-104A	CAT 01	CAT	S11645 ESA	Ariane 1	L01	CSG	ELA1	CNES32
1979-104	1979 Dec 24 1714:38	1979-105A	Gorizont	Gorizont No. 13L	S11648 MOM	Proton-K/DM	303-01	NIIP-5	LC200/40	NK9602-24
1979-105	1979 Dec 28 1151:00	1979-106A	Kosmos-1148	Zenit-4MKM	S11649 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1979-106	1979 Dec 28 1300?	1980-001A	Kosmos-1149	Zenit-6	S11652 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-001	1980 Jan 9 1215?	1980-002A	Molniya-1	Molniya-1	S11662 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1980-002	1980 Jan 11 1228?	1980-003A	Kosmos-1150	Parus	S11667 MO SSSR	Kosmos 11K65M	65067-248	NIIP-53	LC132/2	RAEX
1980-003	1980 Jan 14 1949?	1980-004A	FLTSATCOM F3	FLTSATCOM F3	S11669 USN	SLV-3D Centaur	AC-49	CC	LC36A	JCM
1980-004	1980 Jan 18 0126	1980-005A	Kosmos-1151	Okean-E 2	S11671 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	NK9422-49
1980-005	1980 Jan 23 0700	1980-006A	Kosmos-1152	Feniks No. 928	S11678 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
1980-006	1980 Jan 24 1545	1980-006	Spuskaemiy Kapsula	SpK	A02500 MOM					
		1980-006	Spuskaemiy Kapsula	SpK	A02498 MOM					
1980-007	1980 Jan 25 2036?	1980-007A	Kosmos-1153	Parus	S11680 MO SSSR	Kosmos 11K65M	47164-249	NIIP-53	LC132/2	RAEX
1980-008	1980 Jan 30 1251?	1980-008A	Kosmos-1154	Tselina-D	S11682 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1980-009	1980 Feb 7 1100?	1980-009A	Kosmos-1155	Zenit-6	S11685 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-010	1980 Feb 7 2110	1980-010A	OPS 2581	KH11-3 KENNAN	S11687 NRO/CIA	Titan IIID	23D-19	V	SLC4E	LR800208
1980-011	1980 Feb 9 2308	1980-011A	Navstar 5	Navstar SVN 5	S11690 USAF	Atlas F/SVS	35F	V	SLC3E	LR800211
1980-012	1980 Feb 11 2332?	1980-012A	Kosmos-1156	Strela-1M	S11691 MO SSSR	Kosmos 11K65M	53772-402	NIIP-53	LC132/2	RAEX
		1980-012B	Kosmos-1157	Strela-1M	S11692 MO SSSR					
		1980-012C	Kosmos-1158	Strela-1M	S11693 MO SSSR					
		1980-012D	Kosmos-1159	Strela-1M	S11694 MO SSSR					
		1980-012E	Kosmos-1160	Strela-1M	S11695 MO SSSR					
		1980-012F	Kosmos-1161	Strela-1M	S11696 MO SSSR					
		1980-012G	Kosmos-1162	Strela-1M	S11697 MO SSSR					
		1980-012H	Kosmos-1163	Strela-1M	S11698 MO SSSR					
1980-013	1980 Feb 12 0053	1980-013A	Kosmos-1164	Oko	S11700 MOM	Molniya 8K78M	-	NIIP-53	-	NK9701-29
1980-014	1980 Feb 14 1557	1980-014A	Solar Maximum Mission	SMM	S11703 NASA GSFC	Delta 3910	635/D151	CC	LC17A	JCM
1980-015	1980 Feb 17 0940	1980-015A	Tansei-4	MS-T4	S11706 ISAS	Mu-3S	M-3S-1	KASC	M	JCM
1980-016	1980 Feb 20 0805:00	1980-016A	Raduga	Gran' No. 16L	S11708 MOM	Proton-K/DM	297-01	NIIP-5	LC200/39	NK9810-25
1980-017	1980 Feb 21 1200?	1980-017A	Kosmos-1165	Zenit-4MKM	S11713 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-018	1980 Feb 22 0835	1980-018A	Ayame 2	ECS-b	S11715 NASDA	N-1	N-6 (F)	TMSC	N	WWW-NASDA
1980-019	1980 Mar 3 0927	1980-019A	OPCAE 3	PARCAE 3	S11720 USN	Atlas F/MSD	67F	V	SLC3W	LR800303
		1980-019C	EP 1	SSU	S11731 USN					
		1980-019D	EP 2	SSU	S11732 USN					
		1980-019G	EP 3	SSU	S11745 USN					
1980-020	1980 Mar 4 1030?	1980-020A	Kosmos-1166	Zenit-6	S11722 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-021	1980 Mar 14 1040?	1980-021A	Kosmos-1167	US-P	S11729 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1980-022	1980 Mar 17 2137?	1980-022A	Kosmos-1168	Tsikada	S11735 MO SSSR	Kosmos 11K65M	65098-314	NIIP-53	LC132/1	RAEX
1980-E01	1980 Mar 18 1601	-	[Kosmos]	Tselina-D	MOM	Vostok 8A92M	-	NIIP-53	-	Sergeev96
1980-023	1980 Mar 27 0730?	1980-023A	Kosmos-1169	Vektor	S11741 MO SSSR	Kosmos 11K65M	65098-311	NIIP-53	LC132/1	RAEX
1980-024	1980 Mar 27 1853:00	1980-024A	Progress-8	Progress 7K-TG No. 108	S11743 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1980-025	1980 Apr 1 0800?	1980-025A	Kosmos-1170	Zenit-4MKM	S11747 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1980-026	1980 Apr 3 0740?	1980-026A	Kosmos-1171	Lira	S11750 MO SSSR	Kosmos 11K65M	47198-315	NIIP-53	LC132/2	RAEX
1980-027	1980 Apr 9 1338	1980-027A	Soyuz-35	Soyuz 7K-T No. 51	S11753 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1980-028	1980 Apr 12 2018	1980-028A	Kosmos-1172	Oko	S11758 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1980-029	1980 Apr 17 0830?	1980-029A	Kosmos-1173	Zenit-4MKM	S11763 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1980-030	1980 Apr 18 0051	1980-030A	Kosmos-1174	IS	S11765 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	JCM
1980-031	1980 Apr 18 1731	1980-031C	Kosmos-1175	Molniya-3 No. 26	S11769 MOM	Molniya 8K78M	-	NIIP-53	-	NK9701-29
1980-032	1980 Apr 26 2200	1980-032A	Navstar 6	Navstar SVN 6	S11783 USAF	Atlas F/SVS	34F	V	SLC3E	JCM
1980-033	1980 Apr 27 0624:00	1980-033A	Progress-9	Progress 7K-TG No. 109	S11784 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1980-034	1980 Apr 29 1140?	1980-034B	Kosmos-1176	US-A	S11968 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1980-035	1980 Apr 29 1330	1980-035A	Kosmos-1177	Yantar'-4K1 No. 2	S11789 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1980-035	Spuskaemiy Kapsula	SpK	A02524 MOM					
		1980-035	Spuskaemiy Kapsula	SpK	A02538 MOM					
1980-036	1980 May 7 1300?	1980-036A	Kosmos-1178	Zenit-6	S11793 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-037	1980 May 14 1300?	1980-037A	Kosmos-1179	Yug	S11796 MO SSSR	Kosmos 11K65M	53783-456	NIIP-53	LC132/1	RAEX
1980-038	1980 May 15 0535?	1980-038A	Kosmos-1180	Orion	S11798 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-039	1980 May 20 0921?	1980-039A	Kosmos-1181	Parus	S11803 MO SSSR	Kosmos 11K65M	47175-116	NIIP-53	LC132/2	RAEX
1980-040	1980 May 23 0710	1980-040A	Kosmos-1182	Fram	S11808 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1980-F01	1980 May 23 1429:39	1980-F01	CAT	CAT	F00816 ESA	Ariane 1	L02	CSG	ELA1	CNES32
		1980-F01	Amsat Phase 3A	Amsat Phase 3A	F00817 AMSAT-DL					

		1980-F01	Feuerrad	Feuerrad	F00818	DFVLR					
		1980-F01	Feuerrad subsatellite 1	Feuerrad	F00819	DFVLR					
		1980-F01	Feuerrad subsatellite 2	Feuerrad	F00820	DFVLR					
		1980-F01	Feuerrad subsatellite 3	Feuerrad	F00821	DFVLR					
		1980-F01	Feuerrad subsatellite 4	Feuerrad	F00822	DFVLR					
1980-041	1980 May 26 1821	1980-041A	Soyuz-36	Soyuz 7K-T No. 52	S11811	MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1980-042	1980 May 28 1200?	1980-042A	Kosmos-1183	Zenit-6	S11816	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-043	1980 May 29 1053	1980-043A	NOAA B	NOAA B	S11819	NOAA	Atlas F	19F	V	SLC3W	JCM
1980-044	1980 Jun 4 0734?	1980-044A	Kosmos-1184	Tselina-D	S11821	MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1980-045	1980 Jun 5 1419	1980-045A	Soyuz T-2	Soyuz 7K-ST No. 7L	S11825	MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1980-046	1980 Jun 6 0700	1980-046A	Kosmos-1185	Resurs-F1 17F41 No. 12	S11827	MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1980-047	1980 Jun 6 1100?	1980-047A	Kosmos-1186	Romb	S11829	MO SSSR	Kosmos 11K65M	47168-306	NIIP-53	LC132/1	RAEX
		1980-047D	Kosmos-1186 SS 1	ESO	S11912	MO SSSR					
		1980-047E	Kosmos-1186 SS 2	ESO	S11913	MO SSSR					
		1980-047F	Kosmos-1186 SS 3	ESO	S12407	MO SSSR					
		1980-047G	Kosmos-1186 SS 4	ESO	S12408	MO SSSR					
		1980-047H	Kosmos-1186 SS 5	ESO	S12412	MO SSSR					
		1980-047J	Kosmos-1186 SS 6	ESO	S12413	MO SSSR					
		1980-047K	Kosmos-1186 SS 7	ESO	S12414	MO SSSR					
		1980-047L	Kosmos-1186 SS 8	ESO	S12415	MO SSSR					
		1980-047M	Kosmos-1186 SS 9	ESO	S12416	MO SSSR					
		1980-047N	Kosmos-1186 SS 10	ESO	S12422	MO SSSR					
		1980-047P	Kosmos-1186 SS 11	ESO	S12453	MO SSSR					
		1980-047Q	Kosmos-1186 SS 12	ESO	S12459	MO SSSR					
		1980-047R	Kosmos-1186 SS 13	ESO	S12480	MO SSSR					
		1980-047S	Kosmos-1186 SS 14	ESO	S12481	MO SSSR					
		1980-047T	Kosmos-1186 SS 15	ESO	S12482	MO SSSR					
		1980-047U	Kosmos-1186 SS 16	ESO	S12483	MO SSSR					
		1980-047V	Kosmos-1186 SS 17	ESO	S12484	MO SSSR					
		1980-047W	Kosmos-1186 SS 18	ESO	S12485	MO SSSR					
		1980-047X	Kosmos-1186 SS 19	ESO	S12486	MO SSSR					
		1980-047Y	Kosmos-1186 SS 20	ESO	S12487	MO SSSR					
		1980-047Z	Kosmos-1186 SS 21	ESO	S12490	MO SSSR					
		1980-047AA	Kosmos-1186 SS 22	ESO	S12509	MO SSSR					
		1980-047AB	Kosmos-1186 SS 23	ESO	S12510	MO SSSR					
		1980-047AC	Kosmos-1186 SS 24	ESO	S12511	MO SSSR					
1980-048	1980 Jun 12 1230?	1980-048A	Kosmos-1187	Zenit-6	S11837	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-049	1980 Jun 14 0049:50	1980-049A	Gorizont	Gorizont No. 15L	S11841	MOM	Proton-K/DM	303-02	NIIP-5	LC200/39	NK9602-24
1980-050	1980 Jun 14 2052	1980-050A	Kosmos-1188	Oko	S11844	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1980-051	1980 Jun 18 0614:12	1980-051A	Meteor-Priroda	Meteor-Priroda No. 3-1	S11848	MOM	Vostok 8A92M	-	NIIP-5	-	NK9422-46
1980-052	1980 Jun 18 1829	1980-052A	OPS 3123	KH9-16 HEXAGON	S11850	NRO/CIA	Titan I1ID	23D-16	V	SLC4E	JCM
		1980-052C	OPS 1292	SS C 6	S11852	USAF/CIA					
		1980-052	SRV-1	SRV-1	A02487	NRO					
		1980-052	SRV-2	SRV-2	A02489	NRO					
		1980-052	SRV-3	SRV-3	A02491	NRO					
		1980-052	SRV-4	SRV-4	A02493	NRO					
1980-053	1980 Jun 21 1834?	1980-053A	Molniya-1	Molniya-1	S11856	MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1980-054	1980 Jun 26 1220?	1980-054A	Kosmos-1189	Zenit-6	S11863	MOM	Proton-K/DM	-	NIIP-53	-	RAEX
1980-055	1980 Jun 29 0440:42	1980-055A	Progress-10	Progress 7K-TG No. 110	S11867	MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1980-056	1980 Jul 1 0712?	1980-056A	Kosmos-1190	Strela-2	S11869	MO SSSR	Kosmos 11K65M	47182-416	NIIP-53	LC132/2	RAEX
1980-057	1980 Jul 2 0054	1980-057A	Kosmos-1191	Oko	S11871	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1980-058	1980 Jul 9 0042?	1980-058A	Kosmos-1192	Strela-1M	S11875	MO SSSR	Kosmos 11K65M	65072-409	NIIP-53	LC132/2	RAEX
		1980-058B	Kosmos-1193	Strela-1M	S11876	MO SSSR					
		1980-058C	Kosmos-1194	Strela-1M	S11877	MO SSSR					
		1980-058D	Kosmos-1195	Strela-1M	S11878	MO SSSR					
		1980-058E	Kosmos-1196	Strela-1M	S11879	MO SSSR					
		1980-058F	Kosmos-1197	Strela-1M	S11880	MO SSSR					
		1980-058G	Kosmos-1198	Strela-1M	S11881	MO SSSR					
		1980-058H	Kosmos-1199	Strela-1M	S11882	MO SSSR					
1980-059	1980 Jul 9 1240?	1980-059A	Kosmos-1200	Zenit-6	S11884	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-060	1980 Jul 14 2235	1980-060A	Ekran	Ekran No. 19L	S11890	MOM	Proton-K/DM	301-01	NIIP-5	LC200/40	NK9810-25
1980-F02	1980 Jul 15 0222:11	1980-F02	DMSP 5D F-5	DMSP 5D S-4	F00829	USAF	Thor DSV-2U	304	V	SLC10W	SAC7383
1980-061	1980 Jul 15 0730	1980-061A	Kosmos-1201	Fram	S11894	MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1980-062	1980 Jul 18 0234	1980-062A	Rohini RS-1	Rohini RS-1	S11899	ISRO	SLV-3	SLV-3-E2	SHAR	SLV	SP-4024
1980-063	1980 Jul 18 1037	1980-063A	Molniya-3	Molniya-3 No. 27	S11896	MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1980-064	1980 Jul 23 1833	1980-064A	Soyuz-37	Soyuz 7K-T No. 53	S11905	MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1980-065	1980 Jul 24 1240?	1980-065A	Kosmos-1202	Zenit-6	S11907	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1980-066	1980 Jul 31 0745	1980-066A	Kosmos-1203	Resurs-F1 17F41 No. 13	S11915	MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK95-20-29
1980-067	1980 Jul 31 1020?	1980-067A	Kosmos-1204	Romb	S11917	MO SSSR	Kosmos 11K65M	47175-122	GTSP-4	LC107/1	RAEX
		1980-067C	Kosmos-1204 SS 1	ESO	S11960	MO SSSR					
		1980-067D	Kosmos-1204 SS 2	ESO	S11961	MO SSSR					
		1980-067E	Kosmos-1204 SS 3	ESO	S11987	MO SSSR					
		1980-067F	Kosmos-1204 SS 4	ESO	S11988	MO SSSR					
		1980-067G	Kosmos-1204 SS 5	ESO	S11989	MO SSSR					
		1980-067H	Kosmos-1204 SS 6	ESO	S11992	MO SSSR					
		1980-067J	Kosmos-1204 SS 7	ESO	S12010	MO SSSR					
		1980-067K	Kosmos-1204 SS 8	ESO	S12011	MO SSSR					
		1980-067L	Kosmos-1204 SS 9	ESO	S12014	MO SSSR					
		1980-067M	Kosmos-1204 SS 10	ESO	S12015	MO SSSR					
		1980-067N	Kosmos-1204 SS 11	ESO	S12036	MO SSSR					
		1980-067P	Kosmos-1204 SS 12	ESO	S12037	MO SSSR					
		1980-067Q	Kosmos-1204 SS 13	ESO	S12038	MO SSSR					

		1980-067R	Kosmos-1204 SS 14	ESO	S12047	MO SSSR								
		1980-067S	Kosmos-1204 SS 15	ESO	S12048	MO SSSR								
		1980-067T	Kosmos-1204 SS 16	ESO	S12049	MO SSSR								
		1980-067U	Kosmos-1204 SS 17	ESO	S12052	MO SSSR								
		1980-067V	Kosmos-1204 SS 18	ESO	S12053	MO SSSR								
		1980-067W	Kosmos-1204 SS 19	ESO	S12056	MO SSSR								
		1980-067X	Kosmos-1204 SS 20	ESO	S12057	MO SSSR								
		1980-067Y	Kosmos-1204 SS 21	ESO	S12074	MO SSSR								
		1980-067Z	Kosmos-1204 SS 22	ESO	S12075	MO SSSR								
		1980-067	Kosmos-1204 SS 23	ESO	A02544	MO SSSR								
		1980-067	Kosmos-1204 SS 24	ESO	A02545	MO SSSR								
1980-068	1980 Aug 12 1150?	1980-068A	Kosmos-1205	Zenit-6	S11924	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-069	1980 Aug 15 0534?	1980-069A	Kosmos-1206	Tselina-D	S11932	MOM	Vostok 8A92M	-		NIIP-53	-		RAEX	
1980-070	1980 Aug 22 1000	1980-070A	Kosmos-1207	Fram	S11938	MOM	Soyuz 11A511U	-		NIIP-53	-		NK96-26-40	
1980-071	1980 Aug 26 1530	1980-071A	Kosmos-1208	Feniks No. 927	S11945	MOM	Soyuz 11A511U	-		NIIP-53	-		NK9718-91	
		1980-071	Spuskaemiy Kapsula	SpK	A02551	MOM								
		1980-071	Spuskaemiy Kapsula	SpK	A02555	MOM								
1980-072	1980 Sep 3 1020	1980-072A	Kosmos-1209	Resurs-F1 17F41 No. 14	S11950	MOM	Soyuz 11A511U	-		NIIP-53	LC41/1		NK95-20-29	
1980-073	1980 Sep 9 1100	1980-073A	Meteor-2	Meteor-2	S11962	MOM	Vostok 8A92M	-		NIIP-53	-		PL-WWW	
1980-074	1980 Sep 9 2227	1980-074A	GOES 4	GOES D	S11964	NOAA	Delta 3914	637/D152		CC	LC17A		JCM	
1980-075	1980 Sep 18 1911	1980-075A	Soyuz-38	Soyuz 7K-T No. 54	S11977	MOM	Soyuz 11A511U	-		NIIP-5	-		JCM	
1980-076	1980 Sep 19 1010?	1980-076A	Kosmos-1210	Zenit-6	S11980	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-077	1980 Sep 23 1030?	1980-077A	Kosmos-1211	Orion	S11982	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-078	1980 Sep 26 1010	1980-078A	Kosmos-1212	Fram	S11985	MOM	Soyuz 11A511U	-		NIIP-53	-		NK96-26-40	
1980-079	1980 Sep 28 1509:55	1980-079A	Progress-11	Progress 7K-TG No. 111	S11993	MOM	Soyuz 11A511U	-		NIIP-5	-		NK9807-46	
1980-080	1980 Oct 3 1200?	1980-080A	Kosmos-1213	Zenit-6	S11997	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-081	1980 Oct 5 1710	1980-081A	Raduga	Gran' No. 17L	S12003	MOM	Proton-K/DM	300-01		NIIP-5	LC200/39		NK9810-25	
1980-082	1980 Oct 10 1310?	1980-082A	Kosmos-1214	Zenit-4MKM	S12008	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-083	1980 Oct 14 2041?	1980-083A	Kosmos-1215	Tselina-O	S12016	MO SSSR	Kosmos 11K65M	47172-401		NIIP-53	LC132/1		RAEX	
1980-084	1980 Oct 16 1220?	1980-084A	Kosmos-1216	Zenit-6	S12019	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-085	1980 Oct 24 1053	1980-085A	Kosmos-1217	Oko	S12032	MOM	Molniya 8K78M	-		NIIP-53	-		NK9715-48	
1980-086	1980 Oct 30 1000	1980-086A	Kosmos-1218	Yantar'-4K1 No. 3	S12039	MOM	Soyuz 11A511U	-		NIIP-5	LC31		NK9718-91	
		1980-086	Spuskaemiy Kapsula	SpK	A02573	MOM								
		1980-086	Spuskaemiy Kapsula	SpK	A02575	MOM								
1980-087	1980 Oct 31 0354	1980-087A	FLTSATCOM F4	FLTSATCOM F4	S12046	USN	SLV-3D Centaur	AC-57		CC	LC36A		JCM	
1980-088	1980 Oct 31 1200?	1980-088A	Kosmos-1219	Zenit-6	S12050	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-089	1980 Nov 4 1504?	1980-089A	Kosmos-1220	US-P	S12054	MO SSSR	Tsiklon-2	-		NIIP-5	LC90		RAEX	
1980-090	1980 Nov 12 1221?	1980-090A	Kosmos-1221	Zenit-6	S12058	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-091	1980 Nov 15 2249	1980-091A	SBS 1	SBS 1	S12065	SBS	Delta 3910/PAM	636/D153		CC	LC17A		JCM	
1980-092	1980 Nov 16 0418?	1980-092A	Molniya-1	Molniya-1	S12066	MOM	Molniya 8K78M	-		NIIP-53	-		RAEX	
1980-093	1980 Nov 21 1153?	1980-093A	Kosmos-1222	Tselina-D	S12071	MOM	Vostok 8A92M	-		NIIP-53	-		RAEX	
1980-094	1980 Nov 27 1418:28	1980-094A	Soyuz T-3	Soyuz 7K-ST No. 8L	S12077	MOM	Soyuz 11A511U	-		NIIP-5	-		JCM	
1980-095	1980 Nov 27 2137	1980-095A	Kosmos-1223	Oko	S12078	MOM	Molniya 8K78M	-		NIIP-53	-		NK9715-48	
1980-096	1980 Dec 1 1215?	1980-096A	Kosmos-1224	Zenit-6	S12084	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-097	1980 Dec 5 0423?	1980-097A	Kosmos-1225	Parus	S12087	MO SSSR	Kosmos 11K65M	65098-317		NIIP-53	LC132/1		RAEX	
1980-098	1980 Dec 6 2331	1980-098A	Intelsat V F2	Intelsat V F2	S12089	Intelsat	SLV-3D Centaur	AC-54		CC	LC36B		JCM	
1980-F03	1980 Dec 9 0718	1980-F03	OPS 3255	PARCAE 4	F00831	USN	Atlas E/MSD	68E		V	SLC3W		JCM	
		1980-F03	SSU	SSU	F00832	USN								
		1980-F03	SSU	SSU	F00833	USN								
		1980-F03	SSU	SSU	F00834	USN								
		1980-F03	LIPS 1	LIPS 1	F00835	USN								
1980-099	1980 Dec 10 2053?	1980-099A	Kosmos-1226	Teikada	S12091	MO SSSR	Kosmos 11K65M	65083-464		NIIP-53	LC132/1		RAEX	
1980-100	1980 Dec 13 1604?	1980-100A	OPS 5805	SDS 4	S12093	NRO/USAF	Titan 34B	34B-3 (3B-53)		V	SLC4W		RAE	
1980-101	1980 Dec 16 1215?	1980-101A	Kosmos-1227	Zenit-6	S12100	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1980-102	1980 Dec 23 2248?	1980-102A	Kosmos-1228	Strela-1M	S12107	MO SSSR	Kosmos 11K65M	47198-318		NIIP-53	LC132/1		RAEX	
		1980-102B	Kosmos-1229	Strela-1M	S12108	MO SSSR								
		1980-102C	Kosmos-1230	Strela-1M	S12109	MO SSSR								
		1980-102D	Kosmos-1231	Strela-1M	S12110	MO SSSR								
		1980-102E	Kosmos-1232	Strela-1M	S12111	MO SSSR								
		1980-102F	Kosmos-1233	Strela-1M	S12112	MO SSSR								
		1980-102G	Kosmos-1234	Strela-1M	S12113	MO SSSR								
		1980-102H	Kosmos-1235	Strela-1M	S12114	MO SSSR								
1980-103	1980 Dec 25 0402?	1980-103A	Prognoz-8	SO-M No. 508	S12116	MOM	Molniya 8K78M	-		NIIP-5	LC31		RAEX	
1980-104	1980 Dec 26 1149	1980-104A	Ekran	Ekran No. 20L	S12120	MOM	Proton-K/DM	304-01		NIIP-5	LC200/40		NK9810-25	
1980-105	1980 Dec 26 1610	1980-105A	Kosmos-1236	Feniks No. 941	S12121	MOM	Soyuz 11A511U	-		NIIP-53	-		NK9718-91	
		1980-105	Spuskaemiy Kapsula	SpK	A02587	MOM								
		1980-105	Spuskaemiy Kapsula	SpK	A02589	MOM								
1981-001	1981 Jan 6 1215?	1981-001A	Kosmos-1237	Zenit-6	S12130	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1981-002	1981 Jan 9 1457	1981-002A	Molniya-3	Molniya-3 No. 25	S12133	MOM	Molniya 8K78M	-		NIIP-53	-		NK9815-26	
1981-003	1981 Jan 16 0900?	1981-003A	Kosmos-1238	Vektor	S12138	MO SSSR	Kosmos 11K65M	53798-319		NIIP-53	LC132/1		RAEX	
1981-004	1981 Jan 16 1200?	1981-004A	Kosmos-1239	Orion	S12140	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX	
1981-005	1981 Jan 20 1100	1981-005A	Kosmos-1240	Feniks No. 975	S12143	MOM	Soyuz 11A511U	-		NIIP-5	LC31		NK9718-91	
		1981-005	Spuskaemiy Kapsula	SpK	A02597	MOM								
		1981-005	Spuskaemiy Kapsula	SpK	A02600	MOM								
1981-006	1981 Jan 21 0829?	1981-006A	Kosmos-1241	Lira	S12149	MO SSSR	Kosmos 11K65M	65082-427		NIIP-53	LC132/1		RAEX	
1981-F01	1981 Jan 23 1120	1981-F01	[Kosmos]	Mussion	F00844	MO SSSR	Tsiklon-3	-		NIIP-53	LC32/1		PL39	
1981-007	1981 Jan 24 1418:02	1981-007A	Progress-12	Progress 7K-TG No. 113	S12152	MOM	Soyuz 11A511U	-		NIIP-5	-		NK9807-46	
1981-008	1981 Jan 27 1458?	1981-008A	Kosmos-1242	Tselina-D	S12154	MOM	Vostok 8A92M	-		NIIP-53	-		RAEX	
1981-009	1981 Jan 30 1627?	1981-009A	Molniya-1	Molniya-1	S12156	MOM	Molniya 8K78M	-		NIIP-53	-		RAEX	
1981-010	1981 Feb 2 0219?	1981-010A	Kosmos-1243	IS	S12160	MO SSSR	Tsiklon-2	-		NIIP-5	LC90		RAEX	
1981-011	1981 Feb 6 0800	1981-011A	Interkosmos-21	AUOS-Z R-P-1K	S12162	IK	Kosmos 11K65M	53793-478		NIIP-53	LC132/1		NK9521-43	
1981-012	1981 Feb 11 0830	1981-012A	Kiku-3	ETS-4	S12295	NASDA	N-2	N-7 (F)		TNSC	N		WWW-NASDA	



1981-013	1981 Feb 12 1821?	1981-013A	Kosmos-1244	Parus	S12297 MO SSSR	Kosmos 11K65M	65098-320	NIIP-53	LC132/1	RAEX
1981-014	1981 Feb 13 1115?	1981-014A	Kosmos-1245	Zenit-6	S12299 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-015	1981 Feb 18 0900?	1981-015A	Kosmos-1246	Siluet No. 1	S12301 MOM	Soyuz 11A511U	-	NIIP-5	LC31	RAEX
1981-016	1981 Feb 19 1000	1981-016A	Kosmos-1247	Oko	S12303 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1981-017	1981 Feb 21 0030	1981-017A	Hinotori	ASTRO-A	S12307 ISAS	Mu-3S	M-3S-2	KASC	M	SRJ
1981-018	1981 Feb 21 2323	1981-018A	Comstar D-4	Comstar D-4	S12309 Comsat	SLV-3D Centaur	AC-42	CC	LC36A	JCM
1981-019	1981 Feb 28 2107?	1981-019A	OPS 1166	KH8-51 GAMBIT	S12315 NRO/USAF	Titan 24B	24B-24 (3B-59)	V	SLC4W	RAE
		1981-019	SRV-1	SRV-1	A02607 NRO/USAF					
		1981-019	SRV-2	SRV-2	A02609 NRO/USAF					
1981-020	1981 Mar 5 1500	1981-020A	Kosmos-1248	Feniks No. 940	S12317 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1981-020	Spuskaemiy Kapsula	SpK	A02614 MOM					
		1981-020	Spuskaemiy Kapsula	SpK	A02617 MOM					
1981-021	1981 Mar 5 1809?	1981-021D	Kosmos-1249	US-A	S12552 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-022	1981 Mar 6 1131?	1981-022A	Kosmos-1250	Strela-1M	S12320 MO SSSR	Kosmos 11K65M	53767-247	NIIP-53	LC132/2	RAEX
		1981-022B	Kosmos-1251	Strela-1M	S12321 MO SSSR					
		1981-022C	Kosmos-1252	Strela-1M	S12322 MO SSSR					
		1981-022D	Kosmos-1253	Strela-1M	S12323 MO SSSR					
		1981-022E	Kosmos-1254	Strela-1M	S12324 MO SSSR					
		1981-022F	Kosmos-1255	Strela-1M	S12325 MO SSSR					
		1981-022G	Kosmos-1256	Strela-1M	S12326 MO SSSR					
		1981-022H	Kosmos-1257	Strela-1M	S12327 MO SSSR					
1981-023	1981 Mar 12 1900:11	1981-023A	Soyuz T-4	Soyuz 7K-ST No. 10L	S12334 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1981-024	1981 Mar 14 1655?	1981-024A	Kosmos-1258	IS	S12337 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-025	1981 Mar 16 1924	1981-025A	DSP F9	DSP 10	S12339 USAF	Titan IIC	23C-22	CC	LC40	JCM
1981-026	1981 Mar 17 0840?	1981-026A	Kosmos-1259	Zenit-6	S12341 MOM	Soyuz 11A511U	-	NIIP-5	LC31	RAEX
1981-027	1981 Mar 18 0440	1981-027A	Raduga	Gran' No. 18L	S12351 MOM	Proton-K/DM	306-01	NIIP-5	LC200/40	NK9810-25
1981-028	1981 Mar 20 2345?	1981-028A	Kosmos-1260	US-P	S12364 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-029	1981 Mar 22 1458:55	1981-029A	Soyuz-39	Soyuz 7K-T No. 55	S12366 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1981-030	1981 Mar 24 0331	1981-030A	Molniya-3	Molniya-3 No. 24	S12368 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1981-F02	1981 Mar 28 0930	1981-F02	[Kosmos]	Feniks No. 979	P00846 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1981-F02	Spuskaemiy Kapsula	SpK	P00840 MOM					
		1981-F02	Spuskaemiy Kapsula	SpK	P00842 MOM					
1981-031	1981 Mar 31 0940	1981-031A	Kosmos-1261	Oko	S12376 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1981-032	1981 Apr 7 1051?	1981-032A	Kosmos-1262	Zenit-6	S12385 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-033	1981 Apr 9 1200?	1981-033A	Kosmos-1263	Vektor	S12388 MO SSSR	Kosmos 11K65M	53798-322	NIIP-53	LC132/1	RAEX
1981-034	1981 Apr 12 1200:04	1981-034A	Columbia	OV-102	S12399 NASA JSC	Space Shuttle	STS-1	MLP1, KSC	LC39A	STSJSC
		1981-034	DFI	DFI PLT	A02623 NASA JSC					
1981-035	1981 Apr 15 1030?	1981-035A	Kosmos-1264	Zenit-6	S12400 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-036	1981 Apr 16 1130?	1981-036A	Kosmos-1265	Zenit-6	S12402 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-037	1981 Apr 21 0345?	1981-037B	Kosmos-1266	US-A	S12429 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-038	1981 Apr 24 2132	1981-038A	Jumpseat 6	Jumpseat 6	S12418 USAF/NSA	Titan 34B	34B-8 (3B-60)	V	SLC4W	LR810426
1981-039	1981 Apr 25 0201	1981-039A	Kosmos-1267	TKS No. 16301	S12419 MOM	Proton-K	299-02	NIIP-5	LC200/39	NK9810-25
		1981-039	Kosmos-1267 VA	TKS VA	A02633 MOM					
1981-040	1981 Apr 28 0900?	1981-040A	Kosmos-1268	Zenit-6	S12423 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-041	1981 May 7 1321?	1981-041A	Kosmos-1269	Strela-2	S12442 MO SSSR	Kosmos 11K65M	47198-321	NIIP-53	LC132/1	RAEX
1981-042	1981 May 14 1716:38	1981-042A	Soyuz-40	Soyuz 7K-T No. 56	S12454 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1981-043	1981 May 14 2145	1981-043A	Meteor-2	Meteor-2	S12456 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1981-044	1981 May 15 0607:17	1981-044A	Nova 1	Nova 1	S12458 USN	Scout G-1	S192C	V	SLC5	LAAFB
1981-045	1981 May 18 1150	1981-045A	Kosmos-1270	Feniks No. 980	S12461 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1981-045	Spuskaemiy Kapsula	SpK	A02637 MOM					
		1981-045	Spuskaemiy Kapsula	SpK	A02642 MOM					
1981-046	1981 May 19 0349?	1981-046A	Kosmos-1271	Taelina-D	S12464 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1981-047	1981 May 21 0910?	1981-047A	Kosmos-1272	Zenit-6	S12466 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-048	1981 May 22 0710	1981-048A	Kosmos-1273	Fram	S12469 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1981-049	1981 May 22 2229	1981-049A	GOES 5	GOES E	S12472 NOAA	Delta 3914	645/D154	CC	LC17A	JCM
1981-050	1981 May 23 2242	1981-050A	Intelsat 501	Intelsat V F1	S12474 Intelsat	SLV-3D Centaur	AC-56	CC	LC36B	JCM
1981-051	1981 May 31 0500	1981-051A	Rohini RS-D-1	Rohini RS-D-1	S12491 ISRO	SLV-3	SLV-3-D3	SHAR	SLV	JCM
1981-052	1981 Jun 3 1400	1981-052A	Kosmos-1274	Feniks No. 942	S12495 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1981-052	Spuskaemiy Kapsula	SpK	A02644 MOM					
		1981-052	Spuskaemiy Kapsula	SpK	A02649 MOM					
1981-053	1981 Jun 4 1541?	1981-053A	Kosmos-1275	Parus	S12504 MO SSSR	Kosmos 11K65M	65098-323	NIIP-53	LC132/2	RAEX
1981-054	1981 Jun 9 0333	1981-054A	Molniya-3	Molniya-3 No. 30	S12512 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1981-055	1981 Jun 16 0700	1981-055A	Kosmos-1276	Fram	S12517 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1981-056	1981 Jun 17 0930?	1981-056A	Kosmos-1277	Zenit-6	S12520 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-057	1981 Jun 19 1232:59	1981-057C	CAT	CAT	S12546 ESA	Ariane 1	L03	CSG	ELA1	CNES32
		1981-057A	Meteosat 2	Meteosat F2	S12544 ESA					
		1981-057B	Apple	Apple	S12545 ISRO					
1981-058	1981 Jun 19 1937:04	1981-058A	Kosmos-1278	Oko	S12547 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1981-059	1981 Jun 23 1052:59	1981-059A	NOAA 7	NOAA 7	S12553 NOAA	Atlas F	87F	V	SLC3W	POES-WWW
1981-060	1981 Jun 24 1747?	1981-060A	Molniya-1	Molniya-1	S12556 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1981-061	1981 Jun 25 2355	1981-061A	Ekran	Ekran No. 21L	S12564 MOM	Proton-K/DM	305-01	NIIP-5	LC200/40	NK9810-25
1981-062	1981 Jul 1 0930?	1981-062A	Kosmos-1279	Zenit-6	S12571 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-063	1981 Jul 2 0710	1981-063A	Kosmos-1280	Resurs-F1 17F41 No. 15	S12577 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK95-20-29
1981-064	1981 Jul 7 1230?	1981-064A	Kosmos-1281	Zenit-6	S12583 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-065	1981 Jul 10 0514	1981-065A	Meteor-Priroda	Meteor-Priroda No. 2-4	S12585 MOM	Vostok 8A92M	-	NIIP-5	-	PL-WWW
		1981-065D	Iskra	RK-01	S19236 MOM					
1981-066	1981 Jul 15 1300	1981-066A	Kosmos-1282	Feniks No. 951	S12588 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1981-066	Spuskaemiy Kapsula	SpK	A02658 MOM					
		1981-066	Spuskaemiy Kapsula	SpK	A02662 MOM					
1981-067	1981 Jul 17 0800?	1981-067A	Kosmos-1283	Zenit-6	S12598 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-068	1981 Jul 29 1155?	1981-068A	Kosmos-1284	Zenit-6	S12614 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-069	1981 Jul 30 2138	1981-069A	Raduga	Gran' No. 19L	S12618 MOM	Proton-K/DM	301-02	NIIP-5	LC200/39	NK9810-25

1981-070 03	1981 Aug 3 0956	1981-070A	Dynamics Explorer 1	DE A	S12624 NASA GSFC	Delta 3913	642/D155	V	SLC2W	MOR S-850-81-
1981-071	1981 Aug 4 0013	1981-070B	Dynamics Explorer 2	DE B	S12625 NASA GSFC					
1981-072	1981 Aug 4 0828?	1981-071A	Kosmos-1285	Oko	S12627 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1981-073	1981 Aug 6 0816	1981-072A	Kosmos-1286	US-P	S12631 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-074	1981 Aug 6 1149?	1981-073A	FLTSATCOM F5	FLTSATCOM F5	S12635 USN	SLV-3D Centaur	AC-59	CC	LC36A	JCM
		1981-074A	Kosmos-1287	Strela-1M	S12636 MO SSSR	Kosmos 11K65M	65055-112	NIIP-53	LC132/2	RAEX
		1981-074B	Kosmos-1288	Strela-1M	S12637 MO SSSR					
		1981-074C	Kosmos-1289	Strela-1M	S12638 MO SSSR					
		1981-074D	Kosmos-1290	Strela-1M	S12639 MO SSSR					
		1981-074E	Kosmos-1291	Strela-1M	S12640 MO SSSR					
		1981-074F	Kosmos-1292	Strela-1M	S12641 MO SSSR					
		1981-074G	Kosmos-1293	Strela-1M	S12642 MO SSSR					
		1981-074H	Kosmos-1294	Strela-1M	S12643 MO SSSR					
1981-075	1981 Aug 7 1335	1981-075A	IK Bulgaria-1300	IK Bulgaria-1300	S12645 MOM	Vostok 8A92M	-	NIIP-53	LC43/3	NK9521-43
1981-076	1981 Aug 10 2003	1981-076A	Himawari 2	GMS 2	S12677 NASDA	N-2	N-8 (F)	TNSC	N	WWW-NASDA
1981-077	1981 Aug 12 0546?	1981-077A	Kosmos-1295	Parus	S12681 MO SSSR	Kosmos 11K65M	47198-324	NIIP-53	LC132/2	RAEX
1981-078	1981 Aug 13 1620	1981-078A	Kosmos-1296	Peniks No. 943	S12687 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1981-078	Spuskaemiy Kapsula	SpK	A02667 MOM					
		1981-078	Spuskaemiy Kapsula	SpK	A02670 MOM					
1981-079	1981 Aug 18 0930?	1981-079A	Kosmos-1297	Zenit-6	S12716 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-080	1981 Aug 21 1020?	1981-080A	Kosmos-1298	Kobal't	S12776 MOM	Soyuz 11A511U	-	NIIP-5	LC1	RAEX
		1981-080	Spuskaemiy Kapsula	SpK	A02672 MOM					
		1981-080	Spuskaemiy Kapsula	SpK	A02674 MOM					
1981-081	1981 Aug 24 1637?	1981-081D	Kosmos-1299	US-A	S12809 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-082	1981 Aug 24 2140?	1981-082A	Kosmos-1300	Tselina-D	S12785 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	RAEX
1981-083	1981 Aug 27 1030	1981-083A	Kosmos-1301	Resurs-F1 17F41 No. 16	S12788 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1981-084	1981 Aug 28 1618?	1981-084A	Kosmos-1302	Strela-2	S12791 MO SSSR	Kosmos 11K65M	47155-101	NIIP-53	LC132/1	RAEX
1981-085	1981 Sep 3 1829	1981-085A	OPS 3984	KH11-4 KENNAN	S12799 NRO/CIA	Titan IIID	23D-22	V	SLC4E	JCM
1981-086	1981 Sep 4 0800?	1981-086A	Kosmos-1303	Zenit-6	S12801 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-087	1981 Sep 4 1106?	1981-087A	Kosmos-1304	Tsikada	S12803 MO SSSR	Kosmos 11K65M	-	NIIP-53	LC132/1	RAEX
1981-088	1981 Sep 11 0843	1981-088A	Kosmos-1305	Molniya-3 No. 28	S12818 MOM	Molniya 8K78M	-	NIIP-53	-	NK9701-29
1981-089	1981 Sep 14 2031?	1981-089C	Kosmos-1306	US-P	S13369 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1981-090	1981 Sep 15 1130?	1981-090A	Kosmos-1307	Zenit-6	S12830 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-091	1981 Sep 18 0334?	1981-091A	Kosmos-1308	Parus	S12835 MO SSSR	Kosmos 11K65M	47195-113	NIIP-53	LC132/1	RAEX
1981-092	1981 Sep 18 0930?	1981-092A	Kosmos-1309	Orion	S12837 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1981-093	1981 Sep 19 2128	1981-093D	SJ-2	SJ-2A	S12845 MAI	Feng Bao 1	FBI-11	JQ	LA2B	Harvey
		1981-093A	SJ-2A	SJ-2B	S12842 MAI					
		1981-093B	SJ-2B	SJ-2C	S12843 MAI					
1981-094	1981 Sep 21 1310?	1981-094A	Aureole 3	AUOS-Z 401 M-A-1K	S12848 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	RAEX
1981-095	1981 Sep 23 0800?	1981-095A	Kosmos-1310	Vektor	S12852 MO SSSR	Kosmos 11K65M	53719-527	NIIP-53	LC132/2	RAEX
1981-096	1981 Sep 24 2309	1981-096A	SBS 2	SBS 2	S12855 SBS	Delta 3910/PAM	641/D156	CC	LC17A	JCM
1981-097	1981 Sep 28 2100?	1981-097A	Kosmos-1311	Romb	S12871 MO SSSR	Kosmos 11K65M	53775-114	NIIP-53	LC132/2	RAEX
		1981-097C	Kosmos-1311 SS 1	ESO	S13054 MO SSSR					
		1981-097D	Kosmos-1311 SS 2	ESO	S13055 MO SSSR					
		1981-097E	Kosmos-1311 SS 3	ESO	S13667 MO SSSR					
		1981-097F	Kosmos-1311 SS 4	ESO	S13668 MO SSSR					
		1981-097G	Kosmos-1311 SS 5	ESO	S13694 MO SSSR					
		1981-097H	Kosmos-1311 SS 6	ESO	S13695 MO SSSR					
		1981-097J	Kosmos-1311 SS 7	ESO	S13723 MO SSSR					
		1981-097K	Kosmos-1311 SS 8	ESO	S13724 MO SSSR					
		1981-097L	Kosmos-1311 SS 9	ESO	S13729 MO SSSR					
		1981-097M	Kosmos-1311 SS 10	ESO	S13731 MO SSSR					
		1981-097N	Kosmos-1311 SS 11	ESO	S13732 MO SSSR					
		1981-097P	Kosmos-1311 SS 12	ESO	S13733 MO SSSR					
		1981-097Q	Kosmos-1311 SS 13	ESO	S13734 MO SSSR					
		1981-097R	Kosmos-1311 SS 14	ESO	S13735 MO SSSR					
		1981-097S	Kosmos-1311 SS 15	ESO	S13743 MO SSSR					
		1981-097T	Kosmos-1311 SS 16	ESO	S13744 MO SSSR					
		1981-097U	Kosmos-1311 SS 17	ESO	S13820 MO SSSR					
		1981-097V	Kosmos-1311 SS 18	ESO	S13821 MO SSSR					
		1981-097W	Kosmos-1311 SS 19	ESO	S13822 MO SSSR					
		1981-097X	Kosmos-1311 SS 20	ESO	S13823 MO SSSR					
		1981-097Y	Kosmos-1311 SS 21	ESO	S13824 MO SSSR					
		1981-097Z	Kosmos-1311 SS 22	ESO	S13828 MO SSSR					
		1981-097AA	Kosmos-1311 SS 23	ESO	S13831 MO SSSR					
		1981-097AB	Kosmos-1311 SS 24	ESO	S13832 MO SSSR					
1981-098	1981 Sep 30 0800	1981-098A	Kosmos-1312	Musson	S12879 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	PL39
1981-099	1981 Oct 1 0900?	1981-099A	Kosmos-1313	Zenit-6	S12881 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-100	1981 Oct 6 1127	1981-100A	Solar Mesosphere Explorer	Solar Mesosphere Explorer	S12887 JPL/UC-LASP	Delta 2310	639/D157	V	SLC2W	JCM
		1981-100B	UoSAT 1	UoSAT 1	S12888 SSTL					
1981-101	1981 Oct 9 1040	1981-101A	Kosmos-1314	Fram	S12895 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1981-102	1981 Oct 9 1659	1981-102A	Raduga	Gran' No. 20L	S12897 MOM	Proton-K/DM	310-01	NIIP-5	LC200/39	NK9810-25
1981-103	1981 Oct 13 2301?	1981-103A	Kosmos-1315	Tselina-D	S12903 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1981-104	1981 Oct 15 0915?	1981-104A	Kosmos-1316	Zenit-6	S12905 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-105	1981 Oct 17 0559	1981-105A	Molniya-3	Molniya-3 No. 31	S12915 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1981-106	1981 Oct 30 0604	1981-106A	Venera-13	4V-1M No. 760	S12927 MOM	Proton-K/D-1	311-01	NIIP-5	LC200/40	NK9810-25
		1981-106D	SA Veneri-13	4V-1 SA	S15599 MOM					
1981-107	1981 Oct 31 0922	1981-107A	OPS 4029	Chalet 3	S12930 USAF/NSA	Titan IIIC	23C-21	CC	LC40	JCM
1981-108	1981 Oct 31 2254	1981-108A	Kosmos-1317	Oko	S12933 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1981-109	1981 Nov 3 1300	1981-109A	Kosmos-1318	Peniks No. 944	S12936 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1981-109	Spuskaemiy Kapsula	SpK	A02695 MOM					

1981-110	1981 Nov 4 0531	1981-110A	Spuskaemiy Kapsula Venera-14	SpK 4V-1M No. 761	A02698 MOM	Proton-K/D-1	311-02	NIIP-5	LC200/39	NK9810-25
1981-111	1981 Nov 12 1510:00	1981-110D	SA Veneri-14	4V-1 SA	S12938 MOM					
		1981-111A	Columbia	OV-102	S15600 MOM	Space Shuttle	STS-2	MLP1,KSC	LC39A	STSJSC
		1981-111	DFI	DFI PLT	S12953 NASA JSC					
		1981-111	OSTA-1	OSTA-1	A02692 NASA JSC					
1981-112	1981 Nov 13 0930?	1981-112A	Kosmos-1319	Zenit-6	A02693 NASA GSFC	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-113	1981 Nov 17 1525?	1981-113A	Molniya-1	Molniya-1	S12954 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1981-114	1981 Nov 20 0137	1981-114A	Satcom 3R	RCA-D	S12959 MOM	Delta 3910/PAM	640/D158	CC	LC17A	JCM
1981-115	1981 Nov 20 0830?	1981-115A	Bhaskara 2	SEO B	S12967 RCA Americom	Kosmos 11K65M	47193-468	GTSP-4	LC107/2	RAEX
1981-116	1981 Nov 28 1808?	1981-116A	Kosmos-1320	Strela-1M	S12968 ISRO	Kosmos 11K65M	65093-121	NIIP-53	LC132/2	RAEX
		1981-116B	Kosmos-1321	Strela-1M	S12975 MO SSSR					
		1981-116C	Kosmos-1322	Strela-1M	S12976 MO SSSR					
		1981-116D	Kosmos-1323	Strela-1M	S12977 MO SSSR					
		1981-116E	Kosmos-1324	Strela-1M	S12978 MO SSSR					
		1981-116F	Kosmos-1325	Strela-1M	S12979 MO SSSR					
		1981-116G	Kosmos-1326	Strela-1M	S12980 MO SSSR					
		1981-116H	Kosmos-1327	Strela-1M	S12981 MO SSSR					
1981-117	1981 Dec 3 1147?	1981-117A	Kosmos-1328	Tselina-D	S12982 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	RAEX
1981-118	1981 Dec 4 0950?	1981-118A	Kosmos-1329	Zenit-6	S12987 MO SSSR	Soyuz 11A511U	-	NIIP-5	-	RAEX
1981-119	1981 Dec 15 2335	1981-119A	Intelsat V F3	Intelsat V F3	S12989 MOM	SLV-3D Centaur	AC-55	CC	LC36B	JCM
1981-120	1981 Dec 17 1100?	1981-120A	RS-3	RS-3	S12994 Intelsat	Kosmos 11K65M	53775-120	NIIP-53	LC132/2	RAEX
		1981-120B	RS-4	RS-4	S12997 Iskra					
		1981-120C	RS-5	RS-5	S12998 Iskra					
		1981-120D	RS-6	RS-6	S12999 Iskra					
		1981-120E	RS-7	RS-7	S13000 Iskra					
		1981-120F	RS-8	RS-8	S13001 Iskra					
1981-F03	1981 Dec 19 0110	1981-F03	Navstar 7	Navstar SVN 7	S13002 Iskra	Atlas E/SVS	76E	V	SLC3E	LR781220
1981-121	1981 Dec 19 1150	1981-121A	Kosmos-1330	Feniks No. 952	F00848 USAF	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1981-121	Spuskaemiy Kapsula	SpK	S13008 MOM					
		1981-121	Spuskaemiy Kapsula	SpK	A02705 MOM					
1981-122	1981 Dec 20 0129:00	1981-122B	CAT/Thesee	CAT/VID	A02716 MOM	Ariane 1	L04	CSG	ELA1	CNES32
		1981-122A	Marecs 1	Marecs A	S13011 ESA					
		1981-123A	Molniya-1	Molniya-1	S13010 ESA					
1981-123	1981 Dec 23 1315?	1982-001A	Kosmos-1331	Strela-2	S13012 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1982-001	1982 Jan 7 1538?	1982-002A	Kosmos-1332	Orion	S13027 MO SSSR	Kosmos 11K65M	53755-102	NIIP-53	LC132/2	RAEX
1982-002	1982 Jan 12 1230?	1982-003A	Kosmos-1333	Parus	S13031 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1982-003	1982 Jan 14 0851?	1982-004A	Satcom 4	RCA-C'	S13033 MO SSSR	Kosmos 11K65M	53767-250	NIIP-53	LC132/2	RAEX
1982-004	1982 Jan 16 0155	1982-005A	Kosmos-1334	Zenit-6	S13035 RCA Americom	Delta 3910/PAM	643/D159	CC	LC17A	MOR O-492-
206-82-05		1982-006A	OPS 2849	KH8-52 GAMBIT	S13036 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1982-005	1982 Jan 20 1130?	1982-006	SRV-1	SRV-1	S13040 NRO/USAF	Titan 24B	24B-26 (3B-62)	V	SLC4W	JCM
1982-006	1982 Jan 21 1936	1982-006	SRV-2	SRV-2	A02722 NRO/USAF					
		1982-007A	Kosmos-1335	Romb	A02724 NRO/USAF	Kosmos 11K65M	65075-115	NIIP-53	LC132/1	RAEX
		1982-007D	Kosmos-1335 SS 1	ESO	S13042 MO SSSR					
		1982-007E	Kosmos-1335 SS 2	ESO	S13140 MO SSSR					
		1982-007F	Kosmos-1335 SS 3	ESO	S13141 MO SSSR					
		1982-007G	Kosmos-1335 SS 4	ESO	S13246 MO SSSR					
		1982-007H	Kosmos-1335 SS 5	ESO	S13247 MO SSSR					
		1982-007I	Kosmos-1335 SS 6	ESO	S13248 MO SSSR					
		1982-007J	Kosmos-1335 SS 7	ESO	S13249 MO SSSR					
		1982-007K	Kosmos-1335 SS 8	ESO	S13250 MO SSSR					
		1982-007L	Kosmos-1335 SS 9	ESO	S13251 MO SSSR					
		1982-007M	Kosmos-1335 SS 10	ESO	S13252 MO SSSR					
		1982-007N	Kosmos-1335 SS 11	ESO	A02370 MO SSSR					
		1982-007P	Kosmos-1335 SS 12	ESO	S13419 MO SSSR					
		1982-007Q	Kosmos-1335 SS 13	ESO	S13420 MO SSSR					
		1982-007R	Kosmos-1335 SS 14	ESO	S13421 MO SSSR					
		1982-007S	Kosmos-1335 SS 15	ESO	S13422 MO SSSR					
		1982-007T	Kosmos-1335 SS 16	ESO	S13429 MO SSSR					
		1982-007U	Kosmos-1335 SS 17	ESO	S13430 MO SSSR					
		1982-007V	Kosmos-1335 SS 18	ESO	S14052 MO SSSR					
		1982-007W	Kosmos-1335 SS 19	ESO	S14053 MO SSSR					
		1982-007X	Kosmos-1335 SS 20	ESO	S14054 MO SSSR					
		1982-007Y	Kosmos-1335 SS 21	ESO	S14055 MO SSSR					
		1982-007Z	Kosmos-1335 SS 22	ESO	S14056 MO SSSR					
		1982-007AA	Kosmos-1335 SS 23	ESO	S14068 MO SSSR					
		1982-007	Kosmos-1335 SS 24	ESO	A02727 MO SSSR					
1982-008	1982 Jan 30 1130	1982-008A	Kosmos-1336	Feniks No. 953	S13045 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1982-008	Spuskaemiy Kapsula	SpK	A02731 MOM					
		1982-008	Spuskaemiy Kapsula	SpK	A02734 MOM					
1982-009	1982 Feb 5 0912	1982-009A	Ekran	Ekran No. 22L	S13056 MOM	Proton-K/DM	308-01	NIIP-5	LC200/40	NK9810-25
1982-010	1982 Feb 11 0111?	1982-010A	Kosmos-1337	US-P	S13061 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1982-011	1982 Feb 16 1110?	1982-011A	Kosmos-1338	Zenit-6	S13063 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1982-012	1982 Feb 17 2156?	1982-012A	Kosmos-1339	Tsikada	S13065 MO SSSR	Kosmos 11K65M	65067-261	NIIP-53	LC132/2	RAEX
1982-013	1982 Feb 19 0142?	1982-013A	Kosmos-1340	Tselina-D	S13067 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1982-014	1982 Feb 26 0004	1982-014A	Westar 4	Westar 4	S13069 WUTC	Delta 3910/PAM	644/D160	CC	LC17A	JCM
1982-015	1982 Feb 26 2010?	1982-015A	Molniya-1	Molniya-1	S13070 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1982-016	1982 Mar 3 0544:38	1982-016A	Kosmos-1341	OkO	S13080 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1982-F01	1982 Mar 4	1982-F01	Kosmos	Romb?	F00851 MO SSSR	Kosmos 11K65M	53739-530	GTSP-4	LC107/1	AVMNLJ
		1982-F01	Kosmos SS 1	ESO	F00852 MO SSSR					
		1982-F01	Kosmos SS 2	ESO	F00853 MO SSSR					





1982-041	1982 May 11 1845	1982-040G 1982-040H 1982-041A 1982-041C 1982-041 1982-041 1982-041 1982-041	Kosmos-1363 Kosmos-1364 OPS 5642 OPS 6553 SRV-1 SRV-2 SRV-3 SRV-4	Strela-1M Strela-1M KH9-17 HEXAGON SS D 4 SRV-1 SRV-2 SRV-3 SRV-4	S13166 MO SSSR S13167 MO SSSR S13170 NRO/CIA S13172 USAF/CIA A02708 NRO A02710 NRO A02712 NRO A02714 NRO	Titan IIID	23D-24	V	SLC4E	JCM
1982-042	1982 May 13 0958:05	1982-042A	Soyuz T-5	Soyuz 7K-ST No. 11L	S13173 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1982-043	1982 May 14 1939?	1982-043C	Kosmos-1365	US-A	S13593 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1982-F02	1982 May 15	1982-F02	[Kosmos]	Zenit-6	F00877 MOM	Soyuz 11A511U	-	NIIP-53	-	AVMNLJ
1982-044	1982 May 17 2350:00	1982-044A	Kosmos-1366	Geizer No. 11L	S13177 MOM	Proton-K/DM	310-02	NIIP-5	LC200/39	NK9422-47
1982-045	1982 May 20 1309	1982-045A	Kosmos-1367	Oko	S13205 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1982-046	1982 May 21 1240?	1982-046A	Kosmos-1368	Zenit-6	S13208 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1982-047	1982 May 23 0558:49	1982-047A	Progress-13	Progress 7K-TG No. 114	S13210 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1982-048	1982 May 25 0900	1982-048A	Kosmos-1369	Resurs-F1 17F41 No. 17	S13213 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK95-20-29
1982-049	1982 May 28 0910?	1982-049A	Kosmos-1370	Siluet No. 2	S13219 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1982-050	1982 May 28 2202?	1982-050A	Molniya-1	Molniya-1	S13237 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1982-051	1982 Jun 1 0437?	1982-051A	Kosmos-1371	Strela-2	S13241 MO SSSR	Kosmos 11K65M	47167-258	NIIP-53	LC132/1	RAEX
1982-052	1982 Jun 1 1358?	1982-052B	Kosmos-1372	US-A	S13411 MO SSSR	Tsiklon-2	-	NIIP-5	LC90	RAEX
1982-053	1982 Jun 2 1250?	1982-053A	Kosmos-1373	Zenit-6	S13244 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1982-054	1982 Jun 3 2130?	1982-054A	Kosmos-1374	BOR-4 No. 404	S13257 MO SSSR	K65M-RB	-	GTSP-4	LC107	RAEX
1982-055	1982 Jun 6 1710?	1982-055A	Kosmos-1375	Lira	S13259 MO SSSR	Kosmos 11K65M	65067-257	NIIP-53	LC132/2	RAEX
1982-056	1982 Jun 8 0745	1982-056A	Kosmos-1376	Resurs-F1 17F41 No. 18	S13263 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK95-20-29
1982-057	1982 Jun 8 1200	1982-057A	Kosmos-1377	Oktan No. 215	S13265 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1982-057	Spuskaemiy Kapsula	SpK	A02777 MOM					
		1982-057	Spuskaemiy Kapsula	SpK	A02785 MOM					
1982-058	1982 Jun 9 0024	1982-058A	Westar 5	Westar 5	S13269 WUTC	Delta 3910/PAM	649/D162	CC	LC17A	JCM
1982-059	1982 Jun 10 1737?	1982-059A	Kosmos-1378	Tselina-D	S13271 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	RAEX
1982-F03	1982 Jun 12	1982-F03	[Kosmos]	Kobalt?	F00881 MOM	Soyuz 11A511U	-	NIIP-5	LC1	AVMNLJ
1982-060	1982 Jun 18 1104	1982-060A	Kosmos-1379	IS-P Uran	S13281 PKO	Tsiklon-2	-	NIIP-5	LC90	JCM
1982-061	1982 Jun 18 1158?	1982-061A	Kosmos-1380	Parus	S13282 MO SSSR	Kosmos 11K65M	53783-460	NIIP-53	LC132/2	RAEX
1982-062	1982 Jun 18 1300	1982-062A	Kosmos-1381	Zenit-6	S13283 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1982-063	1982 Jun 24 1629:48	1982-063A	Soyuz T-6	Soyuz 7K-ST No. 9L	S13292 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1982-064	1982 Jun 25 0228	1982-064A	Kosmos-1382	Oko	S13295 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1982-065	1982 Jun 27 1500:00	1982-065A	Columbia	OV-102	S13300 NASA JSC	Space Shuttle	STS-4	MLP1,KSC	LC39A	STSJSC
		1982-065	DFI	DFI PLT	A02779 NASA JSC					
		1982-065	DoD 82-1	DoD 82-1	A02780 USAF					
1982-066	1982 Jun 29 2145:41	1982-066A	Kosmos-1383	Nadezhda 11F643N No. 514	S13301 MO SSSR	Kosmos 11K65M	47183-457	NIIP-53	LC132/1	NK9713-61
1982-067	1982 Jun 30 1500	1982-067A	Kosmos-1384	Feniks No. 954	S13303 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1982-067	Spuskaemiy Kapsula	SpK	A02787 MOM					
		1982-067	Spuskaemiy Kapsula	SpK	A02793 MOM					
1982-068	1982 Jul 6 0750?	1982-068A	Kosmos-1385	Zenit-6	S13345 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1982-069	1982 Jul 7 0947?	1982-069A	Kosmos-1386	Parus	S13353 MO SSSR	Kosmos 11K65M	65093-473	NIIP-53	LC132/1	RAEX
1982-070	1982 Jul 10 0957:44	1982-070A	Progress-14	Progress 7K-TG No. 117	S13361 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1982-071	1982 Jul 13 0800	1982-071A	Kosmos-1387	Fram	S13365 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1982-072	1982 Jul 16 1759	1982-072A	Landsat 4	Landsat 4	S13367 NASA GSFC	Delta 3920	648/D163	V	SLC2W	JCM
1982-073	1982 Jul 21 0631?	1982-073A	Kosmos-1388	Strela-1M	S13375 MO SSSR	Kosmos 11K65M	65055-103	NIIP-53	LC132/2	RAEX
		1982-073B	Kosmos-1389	Strela-1M	S13376 MO SSSR					
		1982-073C	Kosmos-1390	Strela-1M	S13377 MO SSSR					
		1982-073D	Kosmos-1391	Strela-1M	S13378 MO SSSR					
		1982-073E	Kosmos-1392	Strela-1M	S13379 MO SSSR					
		1982-073F	Kosmos-1393	Strela-1M	S13380 MO SSSR					
		1982-073G	Kosmos-1394	Strela-1M	S13381 MO SSSR					
		1982-073H	Kosmos-1395	Strela-1M	S13382 MO SSSR					
1982-074	1982 Jul 21 0940?	1982-074A	Molniya-1	Molniya-1	S13383 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1982-F04	1982 Jul 22 2211	1982-F04	Ekran	Ekran No. 23L	F00887 MOM	Proton-K/DM	307-02	NIIP-5	LC200/40	NK9810-25
1982-075	1982 Jul 27 1230?	1982-075A	Kosmos-1396	Zenit-6	S13391 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1982-076	1982 Jul 29 1940?	1982-076A	Kosmos-1397	Romb	S13394 MO SSSR	Kosmos 11K65M	53793-472	GTSP-4	LC107/1	RAEX
		1982-076C	Kosmos-1397 SS 1	ESO	S13981 MO SSSR					
		1982-076D	Kosmos-1397 SS 2	ESO	S13982 MO SSSR					
		1982-076E	Kosmos-1397 SS 3	ESO	S13983 MO SSSR					
		1982-076F	Kosmos-1397 SS 4	ESO	S13984 MO SSSR					
		1982-076G	Kosmos-1397 SS 5	ESO	S13985 MO SSSR					
		1982-076H	Kosmos-1397 SS 6	ESO	S13986 MO SSSR					
		1982-076I	Kosmos-1397 SS 7	ESO	S13987 MO SSSR					
		1982-076J	Kosmos-1397 SS 8	ESO	S14008 MO SSSR					
		1982-076K	Kosmos-1397 SS 9	ESO	S14009 MO SSSR					
		1982-076L	Kosmos-1397 SS 10	ESO	S14010 MO SSSR					
		1982-076M	Kosmos-1397 SS 11	ESO	S14011 MO SSSR					
		1982-076N	Kosmos-1397 SS 12	ESO	S14012 MO SSSR					
		1982-076P	Kosmos-1397 SS 13	ESO	S14013 MO SSSR					
		1982-076Q	Kosmos-1397 SS 14	ESO	S14014 MO SSSR					
		1982-076R	Kosmos-1397 SS 15	ESO	S14015 MO SSSR					
		1982-076S	Kosmos-1397 SS 16	ESO	S14016 MO SSSR					
		1982-076T	Kosmos-1397 SS 17	ESO	S14017 MO SSSR					
		1982-076U	Kosmos-1397 SS 18	ESO	S14018 MO SSSR					
		1982-076V	Kosmos-1397 SS 19	ESO	S14019 MO SSSR					
		1982-076W	Kosmos-1397 SS 20	ESO	S14020 MO SSSR					
		1982-076X	Kosmos-1397 SS 21	ESO	S14021 MO SSSR					
		1982-076Y	Kosmos-1397 SS 22	ESO	S14022 MO SSSR					
		1982-076Z	Kosmos-1397 SS 23	ESO	S14023 MO SSSR					
		1982-076	Kosmos-1397 SS 23	ESO	S14024 MO SSSR					
				ESO	S14025 MO SSSR					
				ESO	S14026 MO SSSR					
				ESO	S14027 MO SSSR					
				ESO	S14028 MO SSSR					
				ESO	S14029 MO SSSR					
				ESO	S14030 MO SSSR					
				ESO	S14031 MO SSSR					
				ESO	S14032 MO SSSR					
				ESO	S14033 MO SSSR					
				ESO	S14034 MO SSSR					
				ESO	S14035 MO SSSR					
				ESO	A02797 MO SSSR					



1983-003	1983 Jan 20 1726?	1983-003A	Kosmos-1437	Tselina-D	S13770 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1983-F01	1983 Jan 25	1983-F01	Kosmos	Romb	F00914 MO SSSR	Kosmos 11K65M	47193-480	NIIP-53	LC132/2	AVMNLJ
		1983-F01	Kosmos SS 1	ESO	F00915 MO SSSR					
		1983-F01	Kosmos SS 2	ESO	F00916 MO SSSR					
		1983-F01	Kosmos SS 3	ESO	F00917 MO SSSR					
		1983-F01	Kosmos SS 4	ESO	F00918 MO SSSR					
		1983-F01	Kosmos SS 5	ESO	F00919 MO SSSR					
		1983-F01	Kosmos SS 6	ESO	F00920 MO SSSR					
		1983-F01	Kosmos SS 7	ESO	F00921 MO SSSR					
		1983-F01	Kosmos SS 8	ESO	F00922 MO SSSR					
		1983-F01	Kosmos SS 9	ESO	F00923 MO SSSR					
		1983-F01	Kosmos SS 10	ESO	F00924 MO SSSR					
		1983-F01	Kosmos SS 11	ESO	F00925 MO SSSR					
		1983-F01	Kosmos SS 12	ESO	F00926 MO SSSR					
		1983-F01	Kosmos SS 13	ESO	F00927 MO SSSR					
		1983-F01	Kosmos SS 14	ESO	F00928 MO SSSR					
		1983-F01	Kosmos SS 15	ESO	F00929 MO SSSR					
		1983-F01	Kosmos SS 16	ESO	F00930 MO SSSR					
		1983-F01	Kosmos SS 17	ESO	F00931 MO SSSR					
		1983-F01	Kosmos SS 18	ESO	F00932 MO SSSR					
		1983-F01	Kosmos SS 19	ESO	F00933 MO SSSR					
		1983-F01	Kosmos SS 20	ESO	F00934 MO SSSR					
		1983-F01	Kosmos SS 21	ESO	F00935 MO SSSR					
		1983-F01	Kosmos SS 22	ESO	F00936 MO SSSR					
		1983-F01	Kosmos SS 23	ESO	F00937 MO SSSR					
		1983-F01	Kosmos SS 24	ESO	F00938 MO SSSR					
1983-004	1983 Jan 26 0217	1983-004A	IRAS	IRAS	S13777 JPL/NIVR	Delta 3910	650/D166	V	SLC2W	JCM
		1983-004B	PIX 2	PIX II	A02862 NASA LaRC					
1983-005	1983 Jan 27 0830?	1983-005A	Kosmos-1438	Zenit-6	S13779 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1983-006	1983 Feb 4 0837	1983-006A	Sakura 2A	CS 2A	S13782 NASDA	N-2	N-10 (F)	TNSC	N	WW-NASDA
1983-007	1983 Feb 6 1131	1983-007A	Kosmos-1439	Feniks No. 956	S13784 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1983-007	Spuskaemiy Kapsula	SpK	A02869 MOM					
		1983-007	Spuskaemiy Kapsula	SPK	A02865 MOM					
1983-008	1983 Feb 9 1347	1983-008A	OPS 0252	PARCAE 5	S13791 USN	Atlas H	6001H	V	SLC3E	LR830209
		1983-008E	SSA	SSU	S13844 USN					
		1983-008F	SSB	SSU	S13845 USN					
		1983-008H	SSC	SSU	S13874 USN					
		1983-008B	LIPS 2	LIPS 2	S13792 USN					
1983-009	1983 Feb 10 0715	1983-009A	Kosmos-1440	Resurs-F1 17F41 No. 20	S13793 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1983-010	1983 Feb 16 1003?	1983-010A	Kosmos-1441	Tselina-D	S13818 MOM	Vostok 8A92M	-	NIIP-53	-	RAEX
1983-011	1983 Feb 20 0510	1983-011A	Tenma	ASTRO-B	S13829 ISAS	MU-3S	M-3S-3	KASC	M1	SRJ
1983-012	1983 Feb 25 1245	1983-012A	Kosmos-1442	Oktan No. 248	S13850 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1983-012	Spuskaemiy Kapsula	SpK	A02872 MOM					
		1983-012	Spuskaemiy Kapsula	SpK	A02875 MOM					
1983-013	1983 Mar 2 0937:08	1983-013A	Kosmos-1443	TKS-M No. 16401	S13868 MOM	Proton-K	309-02	NIIP-5	LC200/39	NK9810-25
		1983-013	Kosmos-1443 VA	TKS VA	A02972 MOM					
1983-014	1983 Mar 2 1050?	1983-014A	Kosmos-1444	Zenit-6	S13870 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-015	1983 Mar 11 1529:00	1983-015A	Molniya-3	Molniya-3 No. 34	S13875 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1983-016	1983 Mar 12 1400	1983-016A	Ekran	Ekran No. 18L	S13878 MOM	Proton-K/DM	304-02	NIIP-5	LC200/40	NK9810-25
1983-017	1983 Mar 15 2230?	1983-017A	Kosmos-1445	BOR-4 No. 403	S13883 MO SSSR	K65M-RB	-	GTSP-4	LC107	RAEX
1983-018	1983 Mar 16 0850?	1983-018A	Kosmos-1446	Zenit-6	S13886 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1983-019	1983 Mar 16 1814?	1983-019A	Molniya-1	Molniya-1	S13890 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1983-020	1983 Mar 23 1245:06	1983-020A	Astron	1A No. 602	S13901 MOM	Proton-K/D-1	307-01	NIIP-5	LC200/39	NK9810-25
1983-021	1983 Mar 24 2055:50	1983-021A	Kosmos-1447	Tsikada-Kospas	S13916 MO SSSR	Kosmos 11K65M	53739-548	NIIP-53	LC132/2	PL38
1983-022	1983 Mar 28 1552:00	1983-022A	NOAA 8	NOAA E	S13923 NOAA	Atlas E	73E	V	SLC3W	LR830328
1983-023	1983 Mar 30 0110?	1983-023A	Kosmos-1448	Parus	S13949 MO SSSR	Kosmos 11K65M	65019-522	NIIP-53	LC132/1	RAEX
1983-024	1983 Mar 31 1050?	1983-024A	Kosmos-1449	Zenit-6	S13955 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-025	1983 Apr 2 0202?	1983-025A	Molniya-1	Molniya-1	S13964 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1983-026	1983 Apr 4 1830:00	1983-026A	Challenger	OV-099	S13968 NASA JSC	Space Shuttle	STS-6	MPL2,KSC	LC39A	STSJSC
		1983-026B	TDRS 1	TDRS A	S13969 NASA GSFC					
1983-027	1983 Apr 6 1200?	1983-027A	Kosmos-1450	Vektor	S13972 MO SSSR	Kosmos 11K65M	53719-512	NIIP-53	LC132?	RAEX
1983-028	1983 Apr 8 0445	1983-028A	Raduga	Gran' No. 23L	S13974 MOM	Proton-K/DM	315-02	NIIP-5	LC200/40	NK9810-25
1983-029	1983 Apr 8 0830?	1983-029A	Kosmos-1451	Zenit-6	S13975 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	RAEX
1983-030	1983 Apr 11 2139	1983-030A	Satcom 1R	RCA-F	S13984 RCA Americom	Delta 3924	653/D167	CC	LC17B	MOR M-492-
206-83-07										
1983-031	1983 Apr 12 1820?	1983-031A	Kosmos-1452	Strela-2	S13991 MO SSSR	Kosmos 11K65M	65019-519	NIIP-53	LC132/2	RAEX
1983-032	1983 Apr 15 1845	1983-032A	OPS 2925	KH8-53 GAMBIT	S14001 NRO/USAF	Titan 24B	24B-27 (3B-63)	V	SLC4W	LR830415
		1983-032	SRV-1	SRV-1	A02888 NRO/USAF					
		1983-032	SRV-2	SRV-2	A02890 NRO/USAF					
1983-033	1983 Apr 17 0544?	1983-033A	Rohini RS-D-2	Rohini RS-D-2	S14002 ISRO	SLV-3	SLV-3-D4	SHAR	SLV	RAE
1983-034	1983 Apr 19 1200?	1983-034A	Kosmos-1453	Romb	S14006 MO SSSR	Kosmos 11K65M	47119-520	NIIP-53	LC132/2	RAEX
		1983-034C	Kosmos-1453 SS 1	ESO	S14577 MO SSSR					
		1983-034D	Kosmos-1453 SS 2	ESO	S14578 MO SSSR					
		1983-034E	Kosmos-1453 SS 3	ESO	S14597 MO SSSR					
		1983-034F	Kosmos-1453 SS 4	ESO	S14598 MO SSSR					
		1983-034G	Kosmos-1453 SS 5	ESO	S14730 MO SSSR					
		1983-034H	Kosmos-1453 SS 6	ESO	S14731 MO SSSR					
		1983-034J	Kosmos-1453 SS 7	ESO	S14853 MO SSSR					
		1983-034K	Kosmos-1453 SS 8	ESO	S14854 MO SSSR					
		1983-034L	Kosmos-1453 SS 9	ESO	S14936 MO SSSR					
		1983-034M	Kosmos-1453 SS 10	ESO	S14937 MO SSSR					
		1983-034N	Kosmos-1453 SS 11	ESO	S15007 MO SSSR					

			1983-034P	Kosmos-1453 SS 12	ESO	S15008 MO SSSR							
			1983-034Q	Kosmos-1453 SS 13	ESO	S15013 MO SSSR							
			1983-034R	Kosmos-1453 SS 14	ESO	S15014 MO SSSR							
			1983-034S	Kosmos-1453 SS 15	ESO	S15015 MO SSSR							
			1983-034T	Kosmos-1453 SS 16	ESO	S15016 MO SSSR							
			1983-034U	Kosmos-1453 SS 17	ESO	S15017 MO SSSR							
			1983-034V	Kosmos-1453 SS 18	ESO	S15018 MO SSSR							
			1983-034W	Kosmos-1453 SS 19	ESO	S15019 MO SSSR							
			1983-034X	Kosmos-1453 SS 20	ESO	S15020 MO SSSR							
			1983-034Y	Kosmos-1453 SS 21	ESO	S15376 MO SSSR							
			1983-034Z	Kosmos-1453 SS 22	ESO	S15377 MO SSSR							
			1983-034	Kosmos-1453 SS 23	ESO	A02891 MO SSSR							
			1983-034	Kosmos-1453 SS 24	ESO	A02892 MO SSSR							
1983-035	1983 Apr 20	1310:54	1983-035A	Soyuz T-8	Soyuz 7K-ST No. 13L	S14014 MOM	Soyuz 11A511U	372		NIIP-5	LC1/LC31?	JCM	
1983-036	1983 Apr 22	1430	1983-036A	Kosmos-1454	Feniks No. 957	S14017 MOM	Soyuz 11A511U	-		NIIP-53	-	NK9718-91	
			1983-036	Spuskaemiy Kapsula	SpK	A02900 MOM							
			1983-036	Spuskaemiy Kapsula	SpK	A02903 MOM							
1983-037	1983 Apr 23	1430?	1983-037A	Kosmos-1455	Tselina-D	S14032 MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX	
1983-038	1983 Apr 25	1934	1983-038A	Kosmos-1456	Oko	S14034 MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48	
1983-039	1983 Apr 26	1000	1983-039A	Kosmos-1457	Oktan No. 214	S14039 MOM	Soyuz 11A511U	-		NIIP-5	LC31	NK9718-91	
			1983-039	Spuskaemiy Kapsula	SpK	A02896 MOM							
			1983-039	Spuskaemiy Kapsula	SpK	A02898 MOM							
1983-040	1983 Apr 28	0830	1983-040A	Kosmos-1458	Fram	S14044 MOM	Soyuz 11A511U	-		NIIP-53	-	NK96-26-40	
1983-041	1983 Apr 28	2226	1983-041A	GOES 6	GOES F	S14050 NOAA	Delta 3914	D168		CC	LC17A	JCM	
1983-042	1983 May 6	0300?	1983-042A	Kosmos-1459	Parus	S14057 MO SSSR	Kosmos 11K65M	65019-513		NIIP-53	LC132?	RAEX	
1983-043	1983 May 6	0910?	1983-043A	Kosmos-1460	Zenit-6	S14058 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX	
1983-044	1983 May 7	1030?	1983-044A	Kosmos-1461	US-P	S14064 MO SSSR	Tsiklon-2	-		NIIP-5	-	RAEX	
1983-045	1983 May 17	0800	1983-045A	Kosmos-1462	Resurs-F1 17F41 No. 21	S14071 MOM	Soyuz 11A511U	-		NIIP-53	LC41/1	NK95-20-29	
1983-046	1983 May 19	1200?	1983-046A	Kosmos-1463	Yug	S14075 MO SSSR	Kosmos 11K65M	47119-511		NIIP-53	LC132/1	RAEX	
1983-047	1983 May 19	2226	1983-047A	Intelsat V F6	Intelsat V F6	S14077 Intelsat	SLV-3D Centaur	AC-61		CC	LC36A	JCM	
1983-048	1983 May 24	0259?	1983-048A	Kosmos-1464	Parus	S14084 MO SSSR	Kosmos 11K65M	47139-541		NIIP-53	LC132/1	RAEX	
1983-049	1983 May 26	0500?	1983-049A	Kosmos-1465	Romb	S14087 MO SSSR	Kosmos 11K65M	65083-458		GTSP-4	LC107/1	RAEX	
			1983-049G	Kosmos-1465 SS 1	ESO	S14212 MO SSSR							
			1983-049H	Kosmos-1465 SS 2	ESO	S14213 MO SSSR							
			1983-049J	Kosmos-1465 SS 3	ESO	S14214 MO SSSR							
			1983-049K	Kosmos-1465 SS 4	ESO	S14215 MO SSSR							
			1983-049	Kosmos-1465 SS 5	ESO	A02909 MO SSSR							
			1983-049	Kosmos-1465 SS 6	ESO	A02910 MO SSSR							
			1983-049	Kosmos-1465 SS 7	ESO	A02911 MO SSSR							
			1983-049	Kosmos-1465 SS 8	ESO	A02912 MO SSSR							
			1983-049	Kosmos-1465 SS 9	ESO	A02913 MO SSSR							
			1983-049	Kosmos-1465 SS 10	ESO	A02914 MO SSSR							
			1983-049	Kosmos-1465 SS 11	ESO	A02915 MO SSSR							
			1983-049	Kosmos-1465 SS 12	ESO	A02916 MO SSSR							
			1983-049	Kosmos-1465 SS 13	ESO	A02917 MO SSSR							
			1983-049	Kosmos-1465 SS 14	ESO	A02918 MO SSSR							
			1983-049	Kosmos-1465 SS 15	ESO	A02919 MO SSSR							
			1983-049	Kosmos-1465 SS 16	ESO	A02920 MO SSSR							
			1983-049	Kosmos-1465 SS 17	ESO	A02921 MO SSSR							
			1983-049	Kosmos-1465 SS 18	ESO	A02922 MO SSSR							
			1983-049	Kosmos-1465 SS 19	ESO	A02923 MO SSSR							
			1983-049	Kosmos-1465 SS 20	ESO	A02924 MO SSSR							
			1983-049	Kosmos-1465 SS 21	ESO	A02925 MO SSSR							
			1983-049	Kosmos-1465 SS 22	ESO	A02926 MO SSSR							
			1983-049	Kosmos-1465 SS 23	ESO	A02927 MO SSSR							
			1983-049	Kosmos-1465 SS 24	ESO	A02928 MO SSSR							
1983-050	1983 May 26	1200	1983-050A	Kosmos-1466	Oktan No. 250	S14089 MOM	Soyuz 11A511U	-		NIIP-5	LC31	NK9718-91	
			1983-050	Spuskaemiy Kapsula	SpK	A02931 MOM							
			1983-050	Spuskaemiy Kapsula	SpK	A02933 MOM							
1983-051	1983 May 26	1518	1983-051A	Exosat	Exosat	S14095 ESA	Delta 3914	D169		V	SLC2W	LR830526	
1983-052	1983 May 31	1140?	1983-052A	Kosmos-1467	Zenit-6	S14100 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1983-053	1983 Jun 2	0238:39	1983-053A	Venera-15	4V-2 No. 860	S14104 MOM	Proton-K/D-1	321-01		NIIP-5	LC200/39	NK9810-25	
1983-054	1983 Jun 7	0232	1983-054A	Venera-16	4V-2 No. 861	S14107 MOM	Proton-K/D-1	321-02		NIIP-5	LC200/40	NK9810-25	
1983-055	1983 Jun 7	0750	1983-055A	Resurs-1468	Resurs-F1 17F41 No. 22	S14110 MOM	Soyuz 11A511U	-		NIIP-53	LC41/1	NK95-20-29	
1983-056	1983 Jun 9	2323	1983-056A	OPS 6432	PARCAE	S14112 USN	Atlas H	6002H		V	SLC3E	JG9602	
			1983-056C	GB1	SSU	S14143 USN							
			1983-056D	GB2	SSU	S14144 USN							
			1983-056G	GB3	SSU	S14180 USN							
1983-057	1983 Jun 14	1215?	1983-057A	Kosmos-1469	Zenit-6	S14123 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1983-058	1983 Jun 16	1159:03	1983-058A	ECS 1	ECS 1	S14128 ESA	Ariane 1	L6		CSG	ELA1	Desobeau	
			1983-058B	Oscar 10	Amsat Phase 3B	S14129 AMSAT-DL							
1983-059	1983 Jun 18	1133:00	1983-059A	Challenger	OV-099	S14132 NASA JSC	Space Shuttle	STS-7		MLP1,KSC	LC39A	STSJSC	
			1983-059F	SPAS 1	SPAS 1	S14142 MBB							
			1983-059B	Anik C2	Anik C2	S14133 Telesat							
			1983-059C	Palapa B1	Palapa B1	S14134 Perumtel							
			1983-059	OSTA-2	OSTA-2	A02944 NASA MSFC							
1983-060	1983 Jun 20	1845	1983-060A	OPS 0721	KH9-18 HEXAGON	S14137 NRO/CIA	Titan 34D	34D-5 (04D-3)	V		SLC4E	LR830620	
			1983-060C	OPS 3899	SS C 7	S14139 USAF/NSA							
			1983-060	SRV-1	SRV-1	A02854 NRO							
			1983-060	SRV-2	SRV-2	A02856 NRO							
			1983-060	SRV-3	SRV-3	A02858 NRO							
			1983-060	SRV-4	SRV-4	A02860 NRO							



1983-061	1983 Jun 22 2358?	1983-061A	Kosmos-1470	Tselina-D	S14147 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1983-062	1983 Jun 27 0912:18	1983-062A	Soyuz T-9	Soyuz 7K-ST No. 14L	S14152 MOM	Soyuz 11A511U	379	NIIP-5	LC1/LC31?	JCM
1983-063	1983 Jun 27 1537:09	1983-063A	P83-1 Hilat	NNS O-16	S14154 USAF STP	Scout D-1	S205C	V	SLC5	LAAFB
1983-064	1983 Jun 28 1500	1983-064A	Kosmos-1471	Feniks No. 958	S14156 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1983-064	Spuskaemiy Kapsula	SpK	A02957 MOM					
		1983-064	Spuskaemiy Kapsula	SpK	A02960 MOM					
1983-065	1983 Jun 28 2308	1983-065A	Galaxy 1	Galaxy 1	S14158 HCI	Delta 3920/PAM	D170	CC	LC17B	JCM
1983-066	1983 Jun 30 2356:00	1983-066A	Gorizont	Gorizont No. 17L	S14160 MOM	Proton-K/DM	314-02	NIIP-5	LC200/39	NK9602-24
1983-067	1983 Jul 1 1217?	1983-067A	Prognoz-9	SO-M No. 509	S14163 MOM	Molniya 8K78M	-	NIIP-5	LC31	RAEX
1983-068	1983 Jul 5 0750?	1983-068A	Kosmos-1472	Zenit-6	S14169 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-069	1983 Jul 6 0031?	1983-069A	Kosmos-1473	Strela-1M	S14171 MO SSSR	Kosmos 11K65M	47183-459	NIIP-53	LC132/2	RAEX
		1983-069B	Kosmos-1474	Strela-1M	S14172 MO SSSR					
		1983-069C	Kosmos-1475	Strela-1M	S14173 MO SSSR					
		1983-069D	Kosmos-1476	Strela-1M	S14174 MO SSSR					
		1983-069E	Kosmos-1477	Strela-1M	S14175 MO SSSR					
		1983-069F	Kosmos-1478	Strela-1M	S14176 MO SSSR					
		1983-069G	Kosmos-1479	Strela-1M	S14177 MO SSSR					
		1983-069H	Kosmos-1480	Strela-1M	S14178 MO SSSR					
1983-070	1983 Jul 8 1921	1983-070A	Kosmos-1481	Oko	S14182 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1983-071	1983 Jul 13 0940?	1983-071A	Kosmos-1482	Zenit-6	S14185 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1983-072	1983 Jul 14 1021	1983-072A	GPS 8	Navstar SVN 8	S14189 USAF	Atlas E/SGS-2	75E	V	SLC3W	JG9602
1983-073	1983 Jul 19 1514?	1983-073A	Molniya-1	Molniya-1	S14199 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1983-074	1983 Jul 20 0800	1983-074A	Kosmos-1483	Resurs-F1 17F41 No. 23	S14204 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1983-075	1983 Jul 24 0530:37	1983-075A	Kosmos-1484	Resurs-OE No. 3-2	S14207 MOM	Vostok 8A92M	-	NIIP-5	LC31	NK9422-46
1983-076	1983 Jul 26 1200?	1983-076A	Kosmos-1485	Zenit-6	S14210 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-077	1983 Jul 28 2249	1983-077A	Telstar 301	Telstar 301	S14234 AT&T	Delta 3920/PAM	D171	CC	LC17A	JCM
1983-078	1983 Jul 31 1541	1983-078A	OPS 7304	Jumpseat 7	S14237 USAF/NSA	Titan 34B	34B-9 (3B-65)	V	SLC4W	LR830801
1983-079	1983 Aug 3 1240?	1983-079A	Kosmos-1486	Strela-2	S14240 MO SSSR	Kosmos 11K65M	53783-463	NIIP-53	LC132/2	RAEX
1983-080	1983 Aug 5 0920	1983-080A	Kosmos-1487	Resurs-F1 17F41 No. 25	S14245 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1983-081	1983 Aug 5 2029	1983-081A	Sakura 2B	CS 2B	S14248 NASDA	N-2	N-11(F)	TNSC	N	WW-NASDA
1983-082	1983 Aug 9 1120?	1983-082A	Kosmos-1488	Zenit-6	S14251 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-083	1983 Aug 10 1300	1983-083A	Kosmos-1489	Oktan No. 252	S14256 MOM	Soyuz 11A511U	-	NIIP-5	LC31	NK9718-91
		1983-083	Spuskaemiy Kapsula	SpK	A02976 MOM					
		1983-083	Spuskaemiy Kapsula	SpK	A02989 MOM					
1983-084	1983 Aug 10 1824:26	1983-084A	Kosmos-1490	Uragan No. 12L	S14258 MOM	Proton-K/DM-2	317-01	NIIP-5	LC200/39	NK9810-25
		1983-084B	Kosmos-1491	Uragan No. 13L	S14259 MOM					
		1983-084C	Kosmos-1492	Uragan GVM	S14260 MOM					
1983-085	1983 Aug 17 1208:23	1983-085A	Progress-17	Progress 7K-TG No. 119	S14283 MOM	Soyuz 11A511U	Ts15000-302	NIIP-5	LC1	NK9807-46
1983-086	1983 Aug 19 0600	1983-086A	FSW	FSW	S14288 MAI	Chang Zheng 2C	CZ2C-5 (8)	JQ	LA2B	MTR-4
		1983-086	FSW RV	FSW RV	A02969 MAI					
1983-087	1983 Aug 23 1105?	1983-087A	Kosmos-1493	Zenit-6	S14299 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-088	1983 Aug 25 2002	1983-088A	Raduga	Gran' No. 24L	S14307 MOM	Proton-K/DM	316-02	NIIP-5	LC200/40	NK9810-25
1983-089	1983 Aug 30 0632:00	1983-089A	Challenger	OV-099	S14312 NASA JSC	Space Shuttle	STS-8	MLP2, KSC	LC39A	STSJSC
		1983-089B	Insat 1B	Insat 1B	S14318 ISRO					
		1983-089	PFTA	PFTA	A02978 NASA JSC					
		1983-089	DFI/USPS	DFI PLT	A02980 NASA JSC					
1983-090	1983 Aug 30 2249	1983-090A	Molniya-3	Molniya-3 No. 32	S14313 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1983-091	1983 Aug 31 0630?	1983-091A	Kosmos-1494	Romb	S14316 MO SSSR	Kosmos 11K65M	47139-547	GTsP-4	LC107/1	RAEX
		1983-091C	Kosmos-1453 SS 1	ESO	S14703 MO SSSR					
		1983-091E	Kosmos-1453 SS 2	ESO	S14705 MO SSSR					
		1983-091F	Kosmos-1453 SS 3	ESO	S14706 MO SSSR					
		1983-091G	Kosmos-1453 SS 4	ESO	S14707 MO SSSR					
		1983-091H	Kosmos-1453 SS 5	ESO	S14708 MO SSSR					
		1983-091J	Kosmos-1453 SS 6	ESO	S14709 MO SSSR					
		1983-091K	Kosmos-1453 SS 7	ESO	S14710 MO SSSR					
		1983-091L	Kosmos-1453 SS 8	ESO	S14711 MO SSSR					
		1983-091M	Kosmos-1453 SS 9	ESO	S14718 MO SSSR					
		1983-091N	Kosmos-1453 SS 10	ESO	S14719 MO SSSR					
		1983-091P	Kosmos-1453 SS 11	ESO	S14720 MO SSSR					
		1983-091Q	Kosmos-1453 SS 12	ESO	S14721 MO SSSR					
		1983-091R	Kosmos-1453 SS 13	ESO	S14744 MO SSSR					
		1983-091S	Kosmos-1453 SS 14	ESO	S14745 MO SSSR					
		1983-091T	Kosmos-1453 SS 15	ESO	S14746 MO SSSR					
		1983-091U	Kosmos-1453 SS 16	ESO	S14747 MO SSSR					
		1983-091V	Kosmos-1453 SS 17	ESO	S14748 MO SSSR					
		1983-091W	Kosmos-1453 SS 18	ESO	S14749 MO SSSR					
		1983-091X	Kosmos-1453 SS 19	ESO	S14750 MO SSSR					
		1983-091Y	Kosmos-1453 SS 20	ESO	S14751 MO SSSR					
		1983-091Z	Kosmos-1453 SS 21	ESO	S14752 MO SSSR					
		1983-091AA	Kosmos-1453 SS 22	ESO	S14753 MO SSSR					
		1983-091AB	Kosmos-1453 SS 23	ESO	S14754 MO SSSR					
		1983-091AC	Kosmos-1453 SS 24	ESO	S14755 MO SSSR					
1983-092	1983 Sep 3 1015	1983-092A	Kosmos-1495	Fram	S14320 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1983-093	1983 Sep 7 1324	1983-093A	Kosmos-1496	Oktan No. 251	S14326 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1983-093	Spuskaemiy Kapsula	SpK	A02994 MOM					
		1983-093	Spuskaemiy Kapsula	SpK	A03002 MOM					
1983-094	1983 Sep 8 2252	1983-094A	Satcom 2R	RCA-G	S14328 RCA Americom	Delta 3924	D172	CC	LC17B	MOR M-492-
206-83-08										
1983-095	1983 Sep 9 1100?	1983-095A	Kosmos-1497	Zenit-6	S14330 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-096	1983 Sep 14 1025	1983-096A	Kosmos-1498	Resurs-F1 17R41 No. 24	S14334 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1983-097	1983 Sep 17 1115?	1983-097A	Kosmos-1499	Zenit-6	S14339 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-098	1983 Sep 22 2216	1983-098A	Galaxy 2	Galaxy 2	S14365 HCI	Delta 3920/PAM	D173	CC	LC17A	JCM

1983-F02	1983 Sep 26 1937:51	1983-F02	[Soyuz T]	Soyuz 7K-ST No. 16L	F00940 MOM	Soyuz 11A511U	-	NIIP-5	-	JCM
1983-099	1983 Sep 28 0759	1983-099A	Kosmos-1500	Okean-OE	S14372 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	NK9422-49
1983-100	1983 Sep 29 1737	1983-100A	Ekran	Ekran No. 25L	S14377 MOM	Proton-K/DM	318-01	NIIP-5	LC200/40	NK9810-25
1983-101	1983 Sep 30 1100?	1983-101A	Kosmos-1501	Romb	S14380 MO SSSR	Kosmos 11K65M	65093-482	NIIP-53	LC132/1	RAEX
		1983-101C	Kosmos-1501 SS 1	ESO	S14732 MO SSSR					
		1983-101D	Kosmos-1501 SS 2	ESO	S14733 MO SSSR					
		1983-101E	Kosmos-1501 SS 3	ESO	S14947 MO SSSR					
		1983-101F	Kosmos-1501 SS 4	ESO	S14963 MO SSSR					
		1983-101G	Kosmos-1501 SS 5	ESO	S15108 MO SSSR					
		1983-101H	Kosmos-1501 SS 6	ESO	S15110 MO SSSR					
		1983-101J	Kosmos-1501 SS 7	ESO	S15203 MO SSSR					
		1983-101K	Kosmos-1501 SS 8	ESO	S15204 MO SSSR					
		1983-101L	Kosmos-1501 SS 9	ESO	S15277 MO SSSR					
		1983-101M	Kosmos-1501 SS 10	ESO	S15278 MO SSSR					
		1983-101N	Kosmos-1501 SS 11	ESO	S15374 MO SSSR					
		1983-101P	Kosmos-1501 SS 12	ESO	S15375 MO SSSR					
		1983-101Q	Kosmos-1501 SS 13	ESO	S15425 MO SSSR					
		1983-101R	Kosmos-1501 SS 14	ESO	S15426 MO SSSR					
		1983-101S	Kosmos-1501 SS 15	ESO	S15512 MO SSSR					
		1983-101T	Kosmos-1501 SS 16	ESO	S15513 MO SSSR					
		1983-101U	Kosmos-1501 SS 17	ESO	S15586 MO SSSR					
		1983-101V	Kosmos-1501 SS 18	ESO	S15587 MO SSSR					
		1983-101W	Kosmos-1501 SS 19	ESO	S15588 MO SSSR					
		1983-101X	Kosmos-1501 SS 20	ESO	S15594 MO SSSR					
		1983-101Y	Kosmos-1501 SS 21	ESO	S15862 MO SSSR					
		1983-101Z	Kosmos-1501 SS 22	ESO	S15863 MO SSSR					
		1983-101AA	Kosmos-1501 SS 23	ESO	S15864 MO SSSR					
		1983-101AB	Kosmos-1501 SS 24	ESO	S15865 MO SSSR					
1983-102	1983 Oct 5 1200?	1983-102A	Kosmos-1502	Yug	S14395 MO SSSR	Kosmos 11K65M	65039-540	NIIP-53	LC132/1	RAEX
1983-103	1983 Oct 12 0020?	1983-103A	Kosmos-1503	Strela-2	S14401 MO SSSR	Kosmos 11K65M	65039-543	NIIP-53	LC132/1	RAEX
1983-104	1983 Oct 14 1000?	1983-104A	Kosmos-1504	Kobal't	S14403 MOM	Soyuz 11A511U	-	NIIP-5	LC31	RAEX
		1983-104	Spuskaemiy Kapsula	SpK	A02999 MOM					
		1983-104	Spuskaemiy Kapsula	SpK	A03009 MOM					
1983-105	1983 Oct 19 0045:36	1983-105A	Intelsat V F7	Intelsat V F7	S14421 INTELSAT	Ariane 1	L7	CSG	ELA1	Desobeau
1983-106	1983 Oct 20 0959:05	1983-106A	Progress-18	Progress 7K-TG No. 118	S14422 MOM	Soyuz 11A511U	-	NIIP-5	-	NK9807-46
1983-107	1983 Oct 21 1210?	1983-107A	Kosmos-1505	Zenit-6	S14425 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-108	1983 Oct 26 1720?	1983-108A	Kosmos-1506	Taikada	S14450 MO SSSR	Kosmos 11K65M	47122-331	NIIP-53	LC132/1	RAEX
1983-109	1983 Oct 28 0900	1983-109A	Meteor-2	Meteor-2	S14452 MOM	Vostok 8A92M	-	NIIP-53	-	PL-WWW
1983-110	1983 Oct 29 0830?	1983-110A	Kosmos-1507	US-P	S14455 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1983-111	1983 Nov 11 1230?	1983-111A	Kosmos-1508	Vektor	S14483 MO SSSR	Kosmos 11K65M	65093-470	NIIP-53	LC132/2	RAEX
1983-112	1983 Nov 17 1215?	1983-112A	Kosmos-1509	Zenit-6	S14490 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-113	1983 Nov 18 0632	1983-113A	DMSP	DMSP S-7	S14506 USAF	Atlas E	58E	V	SLC3W	JG9602
1983-114	1983 Nov 23 1645?	1983-114A	Molniya-1	Molniya-1	S14516 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1983-115	1983 Nov 24 1233	1983-115A	Kosmos-1510	Musson	S14521 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	PL39
1983-116	1983 Nov 28 1600:00	1983-116A	Columbia	OV-102	S14523 NASA JSC	Space Shuttle	STS-9	MLP1, KSC	LC39A	STSJSC
		1983-116	Spacelab 1	SL 1 LM	A03016 ESA/NASA					
		1983-116	Spacelab 1 Pallet	SL 1 PLT	A03017 ESA/NASA					
1983-117	1983 Nov 30 1345	1983-117A	Kosmos-1511	Oktan No. 249	S14530 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9718-91
		1983-117	Spuskaemiy Kapsula	SpK	A03022 MOM					
		1983-117	Spuskaemiy Kapsula	SpK	A03027 MOM					
1983-118	1983 Nov 30 1351:00	1983-118A	Gorizont	Gorizont No. 18L	S14532 MOM	Proton-K/DM	308-02	NIIP-5	LC200/39	NK9602-24
1983-119	1983 Dec 7 1210?	1983-119A	Kosmos-1512	Zenit-6	S14542 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1983-120	1983 Dec 8 0613?	1983-120A	Kosmos-1513	Parus	S14546 MO SSSR	Kosmos 11K65M	65019-528	NIIP-53	LC132/2	RAEX
1983-121	1983 Dec 14 0700	1983-121A	Kosmos-1514	Bion No. 6	S14549 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-34
1983-122	1983 Dec 15 1225?	1983-122A	Kosmos-1515	Tselina-D	S14551 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1983-123	1983 Dec 21 0607:59	1983-123A	Molniya-3	Molniya-3 No. 35	S14570 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1983-124	1983 Dec 27 0930?	1983-124A	Kosmos-1516	Siluet No. 3	S14583 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1983-125	1983 Dec 27 1000?	1983-125A	Kosmos-1517	BOR-4 No. 405	S14585 MO SSSR	K65M-RB	-	GTSP-4	LC107	RAEX
1983-126	1983 Dec 28 0348	1983-126A	Kosmos-1518	Oko	S14587 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1983-127	1983 Dec 29 0052:24	1983-127A	Kosmos-1519	Uragan No. 14L	S14590 MOM	Proton-K/DM-2	320-02	NIIP-5	LC200/40	NK9810-25
		1983-127B	Kosmos-1520	Uragan No. 15L	S14591 MOM					
		1983-127C	Kosmos-1521	Uragan GVM	S14592 MOM					
1984-001	1984 Jan 5 2009?	1984-001A	Kosmos-1522	Strela-1M	S14611 MO SSSR	Kosmos 11K65M	47119-529	NIIP-53	LC132/2	RAEX
		1984-001B	Kosmos-1523	Strela-1M	S14612 MO SSSR					
		1984-001C	Kosmos-1524	Strela-1M	S14613 MO SSSR					
		1984-001D	Kosmos-1525	Strela-1M	S14614 MO SSSR					
		1984-001E	Kosmos-1526	Strela-1M	S14615 MO SSSR					
		1984-001F	Kosmos-1527	Strela-1M	S14616 MO SSSR					
		1984-001G	Kosmos-1528	Strela-1M	S14617 MO SSSR					
		1984-001H	Kosmos-1529	Strela-1M	S14618 MO SSSR					
1984-002	1984 Jan 11 1220?	1984-002A	Kosmos-1530	Zenit-6	S14622 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-003	1984 Jan 11 1808?	1984-003A	Kosmos-1531	Parus	S14624 MO SSSR	Kosmos 11K65M	65039-546	NIIP-53	LC132/2	RAEX
1984-004	1984 Jan 13 1440?	1984-004A	Kosmos-1532	Kobal't	S14634 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1984-004	Spuskaemiy Kapsula	SpK	A03041 MOM					
		1984-004	Spuskaemiy Kapsula	SpK	A03058 MOM					
1984-005	1984 Jan 23 0758	1984-005A	Yuri 2A	BS 2A	S14659 NASDA	N-2	N-12(F)	TNSC	N	WWW-NASDA
1984-006	1984 Jan 26 0850?	1984-006A	Kosmos-1533	Zenit-6	S14666 MOM	Soyuz 11A511U2	-	NIIP-5	-	RAEX
1984-007	1984 Jan 26 1200?	1984-007A	Kosmos-1534	Vektor	S14668 MO SSSR	Kosmos 11K65M	53793-469	NIIP-53	LC132/2	RAEX
1984-008	1984 Jan 29 1225	1984-008A	Shiyan Weixing	STW-1	S14670 MAI	Chang Zheng 3	C23-1 (9)	XCC	LC1	JCM
1984-009	1984 Jan 31 0308	1984-009A	OPS 0441	VORTEX 4	S14675 USAF/NSA	Titan 34D/Transtage	34D-10 (OSD-1)	XC	LC40	JCM
1984-010	1984 Feb 2 1738?	1984-010A	Kosmos-1535	Parus	S14679 MO SSSR	Kosmos 11K65M	47139-532	NIIP-53	LC132/1	RAEX
1984-011	1984 Feb 3 1300:00	1984-011A	Challenger	OV-099	S14681 NASA JSC	Space Shuttle	41-B	MLP2, KSC	LC39A	STSJSC

		1984-011B	Westar 6	Westar 6	S14688	WUTC							
		1984-011D	Palapa B2	Palapa B2	S14692	Perumtel							
		1984-011	SPAS 1A	SPAS 1A	A03044	MBB							
		1984-011C	IRT	IRT	S14689	NASA JSC							
		1984-011	MMU 2	MMU 2	A03045	NASA JSC							
1984-012	1984 Feb 5	1844	1984-011	MMU 3	A03046	NASA JSC							
			1984-012A	OPS 8737	S14690	USN	Atlas H	6003H	V	SLC3E		LR840206	
			1984-012C	JD1	S14728	USN							
			1984-012D	JD2	S14729	USN							
			1984-012F	JD3	S14795	USN							
1984-013	1984 Feb 8	0923?	1984-013A	Kosmos-1536	S14699	MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX	
1984-014	1984 Feb 8	1207:26	1984-014A	Soyuz T-10	S14701	MOM	Soyuz 11A511U	-		NIIP-5	-	JCM	
1984-015	1984 Feb 14	0800	1984-015A	Ohzora	S14722	ISAS	Mu-3S	M-3S-4		KASC	M1	SRJ	
1984-016	1984 Feb 15	0846	1984-016A	Raduga	S14725	MOM	Proton-K/DM	318-02		NIIP-5	LC200/39	NK9810-25	
1984-017	1984 Feb 16	0815	1984-017A	Kosmos-1537	S14737	MOM	Soyuz 11A511U	-		NIIP-53	LC41/1	NK95-20-29	
1984-018	1984 Feb 21	0646:05	1984-018A	Progress-19	S14757	MOM	Soyuz 11A511U	-		NIIP-5	-	NK9807-46	
1984-019	1984 Feb 21	1536?	1984-019A	Kosmos-1538	S14759	MO SSSR	Kosmos 11K65M	65039-537		NIIP-53	LC132/1	RAEX	
1984-020	1984 Feb 28	1359?	1984-020A	Kosmos-1539	S14763	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
			1984-020	Spuskaemiy Kapsula	A03069	MOM							
			1984-020	Spuskaemiy Kapsula	A03071	MOM							
1984-021	1984 Mar 1	1759	1984-021A	Landsat 5	S14780	NOAA	Delta 3920	D174	V	SLC2W		LR840301	
			1984-021B	UoSAT 2	S14781	SSTL							
1984-022	1984 Mar 2	0354	1984-022A	Kosmos-1540	S14783	MOM	Proton-K/DM	316-01		NIIP-5	LC200/40	NK9422-47	
1984-023	1984 Mar 5	0050:03	1984-023A	Intelsat V F8	S14786	INTELSAT	Ariane 1	L8		CSG	ELA1	Desobeau	
1984-024	1984 Mar 6	1710	1984-024A	Kosmos-1541	S14790	MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48	
1984-025	1984 Mar 7	0800?	1984-025A	Kosmos-1542	S14793	MOM	Soyuz 11A511U2	-		NIIP-5	-	RAEX	
1984-026	1984 Mar 10	1700?	1984-026A	Kosmos-1543	S14797	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1984-027	1984 Mar 15	1705?	1984-027A	Kosmos-1544	S14819	MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX	
1984-028	1984 Mar 16	1400	1984-028A	Ekran	S14821	MOM	Proton-K/DM	322-01		NIIP-5	LC200/39	NK9810-25	
1984-029	1984 Mar 16	2329?	1984-029A	Molniya-1	S14825	MOM	Molniya 8K78M	-		NIIP-53	-	RAEX	
1984-030	1984 Mar 21	1105?	1984-030A	Kosmos-1545	S14849	MOM	Soyuz 11A511U	-		NIIP-53	LC43/4	RAEX	
1984-031	1984 Mar 29	0553	1984-031A	Kosmos-1546	S14867	MOM	Proton-K/DM	319-02		NIIP-5	LC200/40	NK9810-25	
1984-032	1984 Apr 3	1308:42	1984-032A	Soyuz T-11	S14872	MOM	Soyuz 11A511U	-		NIIP-5	-	JCM	
1984-033	1984 Apr 4	0140:04	1984-033A	Kosmos-1547	S14884	MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48	
1984-034	1984 Apr 6	1358:00	1984-034A	Challenger	S14897	NASA JSC	Space Shuttle	41-C		MLP1,KSC	LC39A	STSJSC	
			1984-034B	LDEF	S14898	NASA LaRC							
			1984-034	SMRM-FSS	A03077	NASA JSC							
			1984-034	MMU 2	A03075	NASA JSC							
			1984-034	MMU 3	A03076	NASA JSC							
1984-035	1984 Apr 8	1120	1984-035A	Shiyan Tongbu Tongxin Wx.	S14899	MAI	Chang Zheng 3	CZ3-2	(10)	XSC	LC1	JCM	
1984-036	1984 Apr 10	1400?	1984-036A	Kosmos-1548	S14902	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
			1984-036	Spuskaemiy Kapsula	A03091	MOM							
			1984-036	Spuskaemiy Kapsula	A03096	MOM							
1984-037	1984 Apr 14	1652	1984-037A	DSP F11	S14930	USAF	Titan 34D/Transtage	34D-11	(05D-2)	CC	LC40	JCM	
1984-038	1984 Apr 15	0812:53	1984-038A	Progress-20	S14932	MOM	Soyuz 11A511U2	-		NIIP-5	-	NK9807-46	
1984-039	1984 Apr 17	1845	1984-039A	OPS 8424	S14935	NRO/USAF	Titan 24B	24B-28	(3B-67)	V	SLC4W	LR840418	
			1984-039	SRV-1	A03087	NRO/USAF							
			1984-039	SRV-2	A03089	NRO/USAF							
1984-040	1984 Apr 19	1140?	1984-040A	Kosmos-1549	S14938	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1984-041	1984 Apr 22	0421	1984-041A	Gorizont	S14940	MOM	Proton-K/DM	312-02		NIIP-5	LC200/39	NK9602-24	
1984-042	1984 May 7	2247:15	1984-042A	Progress-21	S14961	MOM	Soyuz 11A511U	-		NIIP-5	-	NK9807-46	
1984-043	1984 May 11	0619?	1984-043A	Kosmos-1550	S14965	MO SSSR	Kosmos 11K65M	53739-533		NIIP-53	LC132?	RAEX	
1984-044	1984 May 11	1300?	1984-044A	Kosmos-1551	S14967	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1984-045	1984 May 14	1400?	1984-045A	Kosmos-1552	S14971	MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX	
1984-046	1984 May 17	1443?	1984-046A	Kosmos-1553	S14973	MO SSSR	Kosmos 11K65M	47139-538		NIIP-53	LC132/1	RAEX	
1984-047	1984 May 19	1511	1984-047A	Kosmos-1554	S14977	MOM	Proton-K/DM-2	323-02		NIIP-5	LC200/40	NK9810-25	
			1984-047B	Kosmos-1555	S14978	MOM							
			1984-047C	Kosmos-1556	S14979	MOM							
1984-048	1984 May 22	0830	1984-048A	Kosmos-1557	S14982	MOM	Soyuz 11A511U	-		NIIP-53	-	NK96-26-40	
1984-049	1984 May 23	0133:29	1984-049A	Spacenet F1	S14985	GTE	Ariane 1	V9		CSG	ELA1	CNES32	
1984-050	1984 May 25	1130?	1984-050A	Kosmos-1558	S14993	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
			1984-050	Spuskaemiy Kapsula	A03104	MOM							
			1984-050	Spuskaemiy Kapsula	A03109	MOM							
1984-051	1984 May 28	1412:52	1984-051A	Progress-22	S14996	MOM	Soyuz 11A511U	-		NIIP-5	-	NK9807-46	
1984-052	1984 May 28	2152?	1984-052A	Kosmos-1559	S14998	MO SSSR	Kosmos 11K65M	65039-531		NIIP-53	LC132/2	RAEX	
			1984-052B	Kosmos-1560	S14999	MO SSSR							
			1984-052C	Kosmos-1561	S15000	MO SSSR							
			1984-052D	Kosmos-1562	S15001	MO SSSR							
			1984-052E	Kosmos-1563	S15002	MO SSSR							
			1984-052F	Kosmos-1564	S15003	MO SSSR							
			1984-052G	Kosmos-1565	S15004	MO SSSR							
			1984-052H	Kosmos-1566	S15005	MO SSSR							
1984-053	1984 May 30	1846?	1984-053A	Kosmos-1567	S15009	MO SSSR	Tsiklon-2	-		NIIP-5	-	RAEX	
1984-054	1984 Jun 1	1350?	1984-054A	Kosmos-1568	S15011	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1984-055	1984 Jun 6	1534	1984-055A	Kosmos-1569	S15027	MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48	
1984-056	1984 Jun 8	1128?	1984-056A	Kosmos-1570	S15031	MO SSSR	Kosmos 11K65M	53739-542		NIIP-53	LC132/1	RAEX	
1984-057	1984 Jun 9	2303	1984-057A	Intelsat V F9	S15034	Intelsat	Atlas G Centaur	AC-62		CC	LC36B	JCM	
1984-058	1984 Jun 11	0840?	1984-058A	Kosmos-1571	S15036	MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX	
1984-059	1984 Jun 13	1137	1984-059A	GPS 9	S15039	USAF	Atlas E/SGS-2	42E		V	SLC3W	LR840613	
1984-060	1984 Jun 15	0820	1984-060A	Kosmos-1572	S15046	MOM	Soyuz 11A511U	-		NIIP-53	LC41/1	NK95-20-29	
1984-061	1984 Jun 19	1055?	1984-061A	Kosmos-1573	S15051	MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX	
1984-062	1984 Jun 21	1940:03	1984-062A	Kosmos-1574	S15055	MO SSSR	Kosmos 11K65M	53719-521		NIIP-53	LC132/2	PL38	



1984-063	1984 Jun 22 0020:00	1984-063A	Raduga	Gran' No. 27L	S15057 MOM	Proton-K/DM	319-01	NIIP-5	LC200/39	NK9810-25
1984-064	1984 Jun 22 0740	1984-064A	Kosmos-1575	Resurs-F1 17F41 No. 48	S15060 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1984-065	1984 Jun 25 1843?	1984-065A	USA 2	KH9-19 HEXAGON	S15063 NRO/CIA	Titan 34D	34D-4 (04D-1)	V	SLC4E	RAE
		1984-065C	USA 3	SS D 5	S15071 USAF/NSA					
		1984-065	SRV-1	SRV-1	A03029 NRO					
		1984-065	SRV-2	SRV-2	A03031 NRO					
		1984-065	SRV-3	SRV-3	A03033 NRO					
		1984-065	SRV-4	SRV-4	A03035 NRO					
1984-066	1984 Jun 26 1535?	1984-066A	Kosmos-1576	Kobal't	S15070 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1984-066	Spuskaemiy Kapsula	SpK	A03116 MOM					
		1984-066	Spuskaemiy Kapsula	SpK	A03122 MOM					
1984-067	1984 Jun 27 0459?	1984-067A	Kosmos-1577	Parus	S15077 MO SSSR	Kosmos 11K65M	65039-549	NIIP-53	LC132/2	RAEX
1984-068	1984 Jun 28 1310?	1984-068A	Kosmos-1578	Yug	S15080 MO SSSR	Kosmos 11K65M	47134-133	GTsP-4	LC107/1	RAEX
1984-069	1984 Jun 29 0021?	1984-069C	Kosmos-1579	US-A	S15328 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1984-070	1984 Jun 29 1500?	1984-070A	Kosmos-1580	Oblik	S15090 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-071	1984 Jul 3 2131	1984-071A	Kosmos-1581	Oko	S15095 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1984-072	1984 Jul 5 0335?	1984-072A	Meteor-2	Meteor-2	S15099 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1984-073	1984 Jul 17 1740:54	1984-073A	Soyuz T-12	Soyuz 7K-ST No. 18L	S15119 MOM	Soyuz 11A511U2	-	NIIP-5	-	JCM
1984-074	1984 Jul 19 0830	1984-074A	Kosmos-1582	Resurs-F1 17F41 No. 49	S15121 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1984-075	1984 Jul 24 1240?	1984-075A	Kosmos-1583	Oblik	S15123 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-076	1984 Jul 27 0859:59	1984-076A	Kosmos-1584	Oblik (Priroda)	S15131 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1984-077	1984 Jul 31 1229?	1984-077A	Kosmos-1585	Kobal't	S15142 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1984-077	Spuskaemiy Kapsula	SpK	A03124 MOM					
		1984-077	Spuskaemiy Kapsula	SpK	A03144 MOM					
1984-078	1984 Aug 1 2137:00	1984-078A	Gorizont	Gorizont No. 20L	S15144 MOM	Proton-K/DM	324-01	NIIP-5	LC200/40	NK9602-24
1984-079	1984 Aug 2 0838	1984-079A	Kosmos-1586	Oko	S15147 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1984-080	1984 Aug 2 2030	1984-080A	Himawari 3	GMS 3	S15152 NASDA	N-2	N-13(F)	TNSC	N	WW-NASDA
1984-081	1984 Aug 4 1332:54	1984-081A	ECS 2	ECS 2	S15158 Eutelsat	Ariane 3	V10	CSG	ELA1	CNES32
		1984-081B	Telecom 1A	Telecom 1A	S15159 France Tel					
1984-082	1984 Aug 6 1400?	1984-082A	Kosmos-1587	Oblik	S15163 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-083	1984 Aug 7 2250?	1984-083A	Kosmos-1588	US-P	S15167 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1984-084	1984 Aug 8 1208	1984-084A	Kosmos-1589	Musson	S15171 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	PL39
1984-085	1984 Aug 10 0003?	1984-085A	Molniya-1	Molniya-1	S15182 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1984-086	1984 Aug 14 0628:15	1984-086A	Progress-23	Progress 7K-TG No. 124	S15193 MOM	Soyuz 11A511U	711	NIIP-5	LC1	NK9807-46
1984-087	1984 Aug 16 0950	1984-087A	Kosmos-1590	Resurs-F1 17F41 No. 50	S15197 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1984-088	1984 Aug 16 1448	1984-088A	Charge Composition Explorer	AMPTE-CCE	S15199 NASA	Delta 3924	D175	CC	LC17A	JCM
		1984-088B	Ion Release Module	AMPTE-IRM	S15200 DLR					
		1984-088C	UK Subsatellite	AMPTE-UKS	S15201 SRC RAL					
		1984-088D	Solar Cell Experiment	Solar Cell Experiment	A03132 USAF					
1984-089	1984 Aug 24 0826?	1984-089A	Molniya-1	Molniya-1	S15214 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1984-090	1984 Aug 24 1950	1984-090A	Ekran	Ekran No. 27L	S15219 MOM	Proton-K/DM	324-02	NIIP-5	LC200/39	NK9810-25
1984-091	1984 Aug 28 1803	1984-091A	USA 4	SDS 5	S15226 NRO/USAF	Titan 34B	34B-4 (3B-64)	V	SLC4W	LR840829
1984-092	1984 Aug 30 1010	1984-092A	Kosmos-1591	Resurs-F1 17F41 No. 51	S15232 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1984-093	1984 Aug 30 1241:50	1984-093A	Discovery	OV-103	S15234 NASA JSC	Space Shuttle	41-D	MLP2,KSC	LC39A	STSJSC
		1984-093B	SBS 4	SBS D	S15235 SBS					
		1984-093C	Leasat 2	Leasat 2	S15236 HCI					
		1984-093D	Telstar 3C	Telstar 3C	S15237 AT&T					
		1984-093	OAST 1	OAST 1	A03141 NASA					
1984-094	1984 Sep 4 1020?	1984-094A	Kosmos-1592	Oblik	S15257 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-095	1984 Sep 4 1549:53	1984-095A	Kosmos-1593	Uragan No. 18L	S15259 MOM	Proton-K/DM-2	320-01	NIIP-5	LC200/40	NK9810-25
		1984-095B	Kosmos-1594	Uragan No. 19L	S15260 MOM					
		1984-095C	Kosmos-1595	Uragan GVM	S15261 MOM					
1984-096	1984 Sep 7 1913	1984-096A	Kosmos-1596	Oko	S15267 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1984-097	1984 Sep 8 2141	1984-097A	GPS 10	Navstar SVN 10	S15271 USAF	Atlas E/SGS-2	14E	V	SLC3W	LR840909
1984-098	1984 Sep 12 0544	1984-098A	FSW	FSW	S15279 MAI	Chang Zheng 2C	CZ2C-6 (11)	QJ	LA2B	MTR-4
		1984-098	FSW RV	FSW RV	A03149 MAI					
1984-099	1984 Sep 13 1025	1984-099A	Kosmos-1597	Fram	S15287 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1984-100	1984 Sep 13 1554?	1984-100A	Kosmos-1598	Parus	S15292 MO SSSR	Kosmos 11K65M	53739-539	NIIP-53	LC132/1	RAEX
1984-101	1984 Sep 21 2218	1984-101A	Galaxy 3	Galaxy 3	S15308 HCI	Delta 3920/PAM	D176	CC	LC17B	JCM
1984-102	1984 Sep 25 1430?	1984-102A	Kosmos-1599	Kobal't	S15318 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1984-102	Spuskaemiy Kapsula	SpK	A03158 MOM					
		1984-102	Spuskaemiy Kapsula	SpK	A03170 MOM					
1984-103	1984 Sep 27 0810?	1984-103A	Kosmos-1600	Oblik	S15324 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1984-104	1984 Sep 27 0930?	1984-104A	Kosmos-1601	Romb	S15326 MO SSSR	Kosmos 11K65M	53796-180	NIIP-53	LC132/2	RAEX
		1984-104G	Kosmos-1601 SS 1	ESO	S15607 MO SSSR					
		1984-104H	Kosmos-1601 SS 2	ESO	S15608 MO SSSR					
		1984-104J	Kosmos-1601 SS 3	ESO	S15980 MO SSSR					
		1984-104K	Kosmos-1601 SS 4	ESO	S15981 MO SSSR					
		1984-104L	Kosmos-1601 SS 5	ESO	S15982 MO SSSR					
		1984-104M	Kosmos-1601 SS 6	ESO	S15984 MO SSSR					
		1984-104N	Kosmos-1601 SS 7	ESO	S15985 MO SSSR					
		1984-104P	Kosmos-1601 SS 8	ESO	S15987 MO SSSR					
		1984-104Q	Kosmos-1601 SS 9	ESO	S15988 MO SSSR					
		1984-104R	Kosmos-1601 SS 10	ESO	S15989 MO SSSR					
		1984-104S	Kosmos-1601 SS 11	ESO	S15990 MO SSSR					
		1984-104T	Kosmos-1601 SS 12	ESO	S15991 MO SSSR					
		1984-104U	Kosmos-1601 SS 13	ESO	S16003 MO SSSR					
		1984-104V	Kosmos-1601 SS 14	ESO	S16004 MO SSSR					
		1984-104W	Kosmos-1601 SS 15	ESO	S16005 MO SSSR					
		1984-104X	Kosmos-1601 SS 16	ESO	S16006 MO SSSR					
		1984-104Y	Kosmos-1601 SS 17	ESO	S16067 MO SSSR					
		1984-104Z	Kosmos-1601 SS 18	ESO	S16068 MO SSSR					

		1984-104AA	Kosmos-1601 SS 19	ESO	S16069 MO SSSR					
		1984-104AB	Kosmos-1601 SS 20	ESO	S16077 MO SSSR					
		1984-104AC	Kosmos-1601 SS 21	ESO	S16109 MO SSSR					
		1984-104AD	Kosmos-1601 SS 22	ESO	S16954 MO SSSR					
		1984-104AE	Kosmos-1601 SS 23	ESO	S16955 MO SSSR					
		1984-104AF	Kosmos-1601 SS 24	ESO	S17161 MO SSSR					
1984-105	1984 Sep 28 0600	1984-105A	Kosmos-1602	Okean-OE	S15331 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	NK9422-49
1984-106	1984 Sep 28 1400	1984-106A	Kosmos-1603	Tselina-2	S15333 MOM	Proton-K/DM-2	327-02	NIIP-5	LC200/39	NK9810-25
1984-107	1984 Oct 4 1949:13	1984-107A	Kosmos-1604	Oko	S15350 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1984-108	1984 Oct 5 1103:00	1984-108A	Challenger	OV-099	S15353 NASA JSC	Space Shuttle	41-G	MLP1, KSC	LC39A	STSJSC
		1984-108B	ERBS	ERBS	S15354 NASA GSFC					
		1984-108	OSTA-3	OSTA-3	A03161 NASA GSFC					
		1984-108	LFC/ORS	MPES	A03162 -					
1984-109	1984 Oct 11 1443?	1984-109A	Kosmos-1605	Parus	S15359 MO SSSR	Kosmos 11K65M	53734-125	NIIP-53	LC132/2	RAEX
1984-110	1984 Oct 12 0143:34	1984-110A	Nova 3	Nova 3	S15362 USN	Scout G-1	S208C	V	SLC5	LAAFB
1984-111	1984 Oct 18 1746?	1984-111A	Kosmos-1606	Tselina-D	S15369 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1984-112	1984 Oct 31 1229?	1984-112B	Kosmos-1607	US-A	S15502 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1984-113	1984 Nov 8 1215:00	1984-113A	Discovery	OV-103	S15382 NASA JSC	Space Shuttle	51-A	MLP2, KSC	LC39A	STSJSC
		1984-113B	Anik D2	Anik D2	S15383 Telesat					
		1984-113C	Leasat 1	Leasat 1	S15384 HCI					
		1984-113	PLT-HS376	PLT-HS376	A03176 NASA JSC					
		1984-113	PLT-HS376	PLT-HS376	A03177 NASA JSC					
		1984-113	MMU 2	MMU 2	A03171 NASA JSC					
		1984-113	MMU 3	MMU 3	A03172 NASA JSC					
1984-114	1984 Nov 10 0114:18	1984-114A	Spacenet F2	Spacenet F2	S15385 GTE	Ariane 3	V11	CSG	ELA1	CNES32
		1984-114B	Marecs 2	Marecs B2	S15386 ESA					
1984-115	1984 Nov 14 0034	1984-115A	NATO 3D	NATO 3D	S15391 NATO	Delta 3914	D177	CC	LC17A	JCM
1984-116	1984 Nov 14 0740?	1984-116A	Kosmos-1608	Siluet No. 4	S15393 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1984-117	1984 Nov 14 1220?	1984-117A	Kosmos-1609	Oblik	S15395 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-118	1984 Nov 15 0640?	1984-118A	Kosmos-1610	Parus	S15398 MO SSSR	Kosmos 11K65M	47139-124	NIIP-53	LC132/1	RAEX
1984-119	1984 Nov 21 1030?	1984-119A	Kosmos-1611	Kobal't	S15403 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1984-119	Spuskaemiy Kapsula	SpK	A03184 MOM					
		1984-119	Spuskaemiy Kapsula	SpK	A03186 MOM					
1984-120	1984 Nov 27 1412	1984-120A	Kosmos-1612	Meteor-3 No. 1	S15406 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	PL27
1984-121	1984 Nov 29 1400?	1984-121A	Kosmos-1613	Oblik	S15414 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1984-122	1984 Dec 4 1800?	1984-122A	USA 6	KH11-6 KENNAN	S15423 NRO/CIA	Titan 34D	34D-6 (04D-4)	V	SLC4E	RAE
1984-123	1984 Dec 12 1042	1984-123A	NOAA 9	NOAA F	S15427 NOAA	Atlas 8	39E	V	SLC3W	JCM
1984-124	1984 Dec 14 2040?	1984-124A	Molniya-1	Molniya-1	S15429 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1984-125	1984 Dec 15 0916:24	1984-125A	Vega-1	VK No. 901	S15432 MOM	Proton-K/D-1	329-01	NIIP-5	LC200/39	NK9810-25
		1984-125E	SA Vega-1	5VK SA	S15858 MOM					
		1984-125F	AZ Vega-1	Aerostatniy Zond	S15859 MOM					
1984-126	1984 Dec 19 0355?	1984-126A	Kosmos-1614	BOR-4 No. 406	S15442 MO SSSR	K65M-RB	-	GTsP-4	LC107	RAEX
1984-127	1984 Dec 20 1300?	1984-127A	Kosmos-1615	Yug	S15446 MO SSSR	Kosmos 11K65M	47134-127	NIIP-53	LC132/2	RAEX
1984-128	1984 Dec 21 0913:52	1984-128A	Vega-2	5VK No. 902	S15449 MOM	Proton-K/D-1	325-02	NIIP-5	LC200/40	NK9810-25
		1984-128E	SA Vega-2	5VK SA	S15856 MOM					
		1984-128F	AZ Vega-1	Aerostatniy Zond	S15857 MOM					
1984-129	1984 Dec 22 0002	1984-129A	DSP F12	DSP 6R	S15453 USAF	Titan 34D/Transtage	34D-13 (05D-3)	CC	LC40	JCM
1985-001	1985 Jan 7 1926	1985-001A	Sagikake	MS-T5	S15464 ISAS	Mu-3S-II	M-3S2-1	KASC	M1	SRJ
1985-002	1985 Jan 9 1045?	1985-002A	Kosmos-1616	Kobal't	S15467 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1985-002	Spuskaemiy Kapsula	SpK	A03195 MOM					
		1985-002	Spuskaemiy Kapsula	SpK	A03208 MOM					
1985-003	1985 Jan 15 1450?	1985-003A	Kosmos-1617	Strela-3	S15469 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
		1985-003B	Kosmos-1618	Strela-3	S15470 MO SSSR					
		1985-003C	Kosmos-1619	Strela-3	S15471 MO SSSR					
		1985-003D	Kosmos-1620	Strela-3	S15472 MO SSSR					
		1985-003E	Kosmos-1621	Strela-3	S15473 MO SSSR					
		1985-003F	Kosmos-1622	Strela-3	S15474 MO SSSR					
1985-004	1985 Jan 16 0622	1985-004A	Molniya-3	Molniya-3 No. 36	S15476 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1985-005	1985 Jan 16 0819?	1985-005A	Kosmos-1623	Oblik	S15479 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1985-006	1985 Jan 17 1746?	1985-006A	Kosmos-1624	Strela-2	S15482 MO SSSR	Kosmos 11K65M	65034-138	NIIP-53	LC132/1	RAEX
1985-007	1985 Jan 18 1025:00	1985-007A	Gorizont	Gorizont No. 21L	S15484 MOM	Proton-K/DM	326-02	NIIP-5	LC200/39	NK9602-24
1985-008	1985 Jan 23 1958?	1985-008A	Kosmos-1625	US-P	S15492 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1985-009	1985 Jan 24 1645?	1985-009A	Kosmos-1626	Tselina-D	S15494 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1985-010	1985 Jan 24 1950:00	1985-010A	Discovery	OV-103	S15496 NASA JSC	Space Shuttle	51-C	MLP1, KSC	LC39A	STSJSC
		1985-010B	USA 8	Magnum 1	S15543 USAF/NSA					
1985-011	1985 Feb 1 1936?	1985-011A	Kosmos-1627	Parus	S15505 MO SSSR	Kosmos 11K65M	47144-445	NIIP-53	LC132/2	RAEX
1985-012	1985 Feb 6 1100?	1985-012A	Kosmos-1628	Oblik	S15514 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-013	1985 Feb 6 2145?	1985-013A	Meteor-2	Meteor-2	S15516 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1985-014	1985 Feb 8 0610	1985-014A	USA 9	SDS 6	S15546 NRO/USAF	Titan 34B	34B-10 (3B-69)	V	SLC4W	LR850208
1985-015	1985 Feb 8 2322:00	1985-015A	Arabsat 1A	Arabsat 1A	S15560 Arabsat	Ariane 3	V12	CSG	ELA1	CNES32
		1985-015B	Brasilsat 1	SBTS 1	S15561 Telebras					
1985-016	1985 Feb 21 0757	1985-016A	Kosmos-1629	Oko	S15574 MOM	Proton-K/DM	327-01	NIIP-5	LC200/39	NK9810-25
1985-017	1985 Feb 27 1110?	1985-017A	Kosmos-1630	Kobal't	S15582 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1985-017	Spuskaemiy Kapsula	SpK	A03213 MOM					
		1985-017	Spuskaemiy Kapsula	SpK	A03219 MOM					
1985-018	1985 Feb 27 1256?	1985-018A	Kosmos-1631	Vektor	S15584 MO SSSR	Kosmos 11K65M	47134-139	NIIP-53	LC132/1	RAEX
1985-019	1985 Mar 1 1040?	1985-019A	Kosmos-1632	Oblik	S15589 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-020	1985 Mar 5 1539?	1985-020A	Kosmos-1633	Tselina-D	S15592 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1985-021	1985 Mar 13 0200	1985-021A	Geosat 1	Geosat 1	S15595 USN	Atlas E/OIS	41E	V	SLC3W	LR850313
1985-022	1985 Mar 14 0109?	1985-022A	Kosmos-1634	Parus	S15597 MO SSSR	Kosmos 11K65M	53744-146	NIIP-53	LC132/2	RAEX
1985-023	1985 Mar 21 0008?	1985-023A	Kosmos-1635	Strela-1M	S15617 MO SSSR	Kosmos 11K65M	53734-134	NIIP-53	LC132/2	RAEX
		1985-023B	Kosmos-1636	Strela-1M	S15618 MO SSSR					

			1985-023C	Kosmos-1637	Strela-1M	S15619 MO SSSR						
			1985-023D	Kosmos-1638	Strela-1M	S15620 MO SSSR						
			1985-023E	Kosmos-1639	Strela-1M	S15621 MO SSSR						
			1985-023F	Kosmos-1640	Strela-1M	S15622 MO SSSR						
			1985-023G	Kosmos-1641	Strela-1M	S15623 MO SSSR						
			1985-023H	Kosmos-1642	Strela-1M	S15624 MO SSSR						
1985-024	1985 Mar 22 0500		1985-024A	Ekran	Ekran No. 28L	S15626 MOM		Proton-K/DM	328-01	NIIP-5	LC200/40	NK9810-25
1985-025	1985 Mar 22 2358		1985-025A	Intelsat VA F10	Intelsat VA F10	S15629 Intelsat		Atlas G Centaur	AC-63	CC	LC36B	JCM
1985-026	1985 Mar 25 1000?		1985-026A	Kosmos-1643	Kosmos-1643	S15634 MOM		Soyuz 11A511U	-	NIIP-5	-	RAEX
1985-027	1985 Apr 3 0840?		1985-027A	Kosmos-1644	Oblik	S15636 MOM		Soyuz 11A511U	-	NIIP-5	-	RAEX
1985-028	1985 Apr 12 1359:05		1985-028A	Discovery	OV-103	S15641 NASA JSC		Space Shuttle	51-D	MLP1,KSC	LC39A	STSJSC
			1985-028B	Anik C1	Anik C1	S15642 Telesat						
			1985-028C	Leasat 3	Leasat 3	S15643 HCI						
1985-F01	1985 Apr 13		1985-F01	GVM	GVM	F00946 MO RF		Zenit-2	-	NIIP-5	-	AVMNLJ
1985-029	1985 Apr 16 1715		1985-029A	Kosmos-1645	Poton No. 1L	S15645 MOM		Soyuz 11A511U	-	NIIP-53	-	NK9721-34
1985-030	1985 Apr 18 2140?		1985-030A	Kosmos-1646	US-P	S15653 MO SSSR		Tsiklon-2	-	NIIP-5	-	RAEX
1985-031	1985 Apr 19 1400?		1985-031A	Kosmos-1647	Kobal't	S15655 MOM		Soyuz 11A511U	-	NIIP-53	-	RAEX
			1985-031	Spuskaemiy Kapsula	SpK	A03236 MOM						
			1985-031	Spuskaemiy Kapsula	SpK	A03238 MOM						
1985-032	1985 Apr 25 0930?		1985-032A	Kosmos-1648	Oblik	S15659 MOM		Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-033	1985 Apr 26 0548		1985-033A	Prognoz-10-1K	SO-M No. 510	S15661 MOM		Molniya 8K78M	-	NIIP-5	LC31	NK9521-43
1985-034	1985 Apr 29 1602:18		1985-034A	Challenger	OV-099	S15665 NASA JSC		Space Shuttle	51-B	MLP2,KSC	LC39A	STSJSC
			1985-034	Spacelab 3	SL 3 LM	A03231 NASA MSFC						
			1985-034	SL 3 MPESS	MPESS	A03232 NASA MSFC						
			1985-034B	Nusat	Nusat	S15666 Weber CAST						
			1985-034	GLOMR	GLOMR	A03234 USN/DARPA						
1985-035	1985 May 8 0115:38		1985-035A	Gstar 1	Gstar 1A	S15677 GTE		Ariane 3	V13	CSG	ELA1	CNES32
			1985-035B	Telecom 1B	Telecom 1B	S15678 France Tel						
1985-036	1985 May 15 1240?		1985-036A	Kosmos-1649	Oblik	S15694 MOM		Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-037	1985 May 17 2228		1985-037A	Kosmos-1650	Uragan No. 20L	S15697 MOM		Proton-K/DM-2	330-02	NIIP-5	LC200/39	NK9810-25
			1985-037B	Kosmos-1651	Uragan No. 21L	S15698 MOM						
			1985-037C	Kosmos-1652	Uragan GVM	S15699 MOM						
1985-038	1985 May 22 0835		1985-038A	Kosmos-1653	Resurs-F1 17F41 No. 52	S15732 MOM		Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1985-039	1985 May 23 1240?		1985-039A	Kosmos-1654	Kobal't	S15734 MOM		Soyuz 11A511U	-	NIIP-5	-	RAEX
			1985-039	Spuskaemiy Kapsula	SpK	A03246 MOM						
			1985-039	Spuskaemiy Kapsula	SpK	A03243 MOM						
1985-040	1985 May 29 0740:44		1985-040A	Molniya-3	Molniya-3 No. 39	S15738 MOM		Molniya 8K78M	-	NIIP-53	-	NK9815-26
1985-041	1985 May 30 0114?		1985-041A	Kosmos-1655	Tsikada	S15751 MO SSSR		Kosmos 11K65M	47144-148	NIIP-53	LC132/1	RAEX
1985-042	1985 May 30 1459		1985-042A	Kosmos-1656	Tselina-2	S15755 MOM		Proton-K/DM-2	313-02	NIIP-5	LC200/40	NK9810-25
1985-043	1985 Jun 6 0639:52		1985-043A	Soyuz T-13	Soyuz 7K-ST No. 19L	S15804 MOM		Soyuz 11A511U2	002	NIIP-5	LC1/LC31?	JCM
1985-044	1985 Jun 7 0745		1985-044A	Kosmos-1657	Resurs-F1 17F41 No. 54	S15806 MOM		Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1985-045	1985 Jun 11 1427		1985-045A	Kosmos-1658	Oko	S15808 MOM		Molniya 8K78M	-	NIIP-53	-	NK9715-48
1985-046	1985 Jun 13 1220?		1985-046A	Kosmos-1659	Oblik	S15818 MOM		Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-047	1985 Jun 14 1036		1985-047A	Kosmos-1660	Musson	S15821 MO SSSR		Tsiklon-3	-	NIIP-53	LC32/1	PL39
1985-048	1985 Jun 17 1133:00		1985-048A	Discovery	OV-103	S15823 NASA JSC		Space Shuttle	51-G	MLP1,KSC	LC39A	STSJSC
			1985-048B	Morelos 1	Morelos 1	S15824 Morelos						
			1985-048C	Arabsat 1B	Arabsat 1B	S15825 Arabsat						
			1985-048D	Telstar 303	Telstar 3D	S15826 AT&T						
			1985-048E	Spartan 1	Spartan 101	S15831 NASA GSFC						
1985-049	1985 Jun 18 0040:26		1985-049A	Kosmos-1661	Oko	S15827 MOM		Molniya 8K78M	-	NIIP-53	-	NK9715-48
1985-050	1985 Jun 19 1130?		1985-050A	Kosmos-1662	Romb	S15833 MO SSSR		Kosmos 11K65M	65044-147	NIIP-53	LC132/2	RAEX
			1985-050G	Kosmos-1662 SS 1	ESO	S16014 MO SSSR						
			1985-050H	Kosmos-1662 SS 2	ESO	S16015 MO SSSR						
			1985-050J	Kosmos-1662 SS 3	ESO	S16016 MO SSSR						
			1985-050K	Kosmos-1662 SS 4	ESO	S16017 MO SSSR						
			1985-050L	Kosmos-1662 SS 5	ESO	S16256 MO SSSR						
			1985-050M	Kosmos-1662 SS 6	ESO	S16257 MO SSSR						
			1985-050N	Kosmos-1662 SS 7	ESO	S16605 MO SSSR						
			1985-050P	Kosmos-1662 SS 8	ESO	S16606 MO SSSR						
			1985-050Q	Kosmos-1662 SS 9	ESO	S16607 MO SSSR						
			1985-050R	Kosmos-1662 SS 10	ESO	S16608 MO SSSR						
			1985-050S	Kosmos-1662 SS 11	ESO	S16956 MO SSSR						
			1985-050T	Kosmos-1662 SS 12	ESO	S16957 MO SSSR						
			1985-050U	Kosmos-1662 SS 13	ESO	S16958 MO SSSR						
			1985-050V	Kosmos-1662 SS 14	ESO	S16959 MO SSSR						
			1985-050W	Kosmos-1662 SS 15	ESO	S16960 MO SSSR						
			1985-050X	Kosmos-1662 SS 16	ESO	S16980 MO SSSR						
			1985-050Y	Kosmos-1662 SS 17	ESO	S16981 MO SSSR						
			1985-050Z	Kosmos-1662 SS 18	ESO	S17059 MO SSSR						
			1985-050AA	Kosmos-1662 SS 19	ESO	S17060 MO SSSR						
			1985-050AB	Kosmos-1662 SS 20	ESO	S17137 MO SSSR						
			1985-050AC	Kosmos-1662 SS 21	ESO	S17158 MO SSSR						
			1985-050AD	Kosmos-1662 SS 22	ESO	S17818 MO SSSR						
			1985-050AE	Kosmos-1662 SS 23	ESO	S17819 MO SSSR						
			1985-050	Kosmos-1662 SS 24	ESO	A03263 MO SSSR						
1985-051	1985 Jun 21 0039:41		1985-051A	Progress-24	Progress 7K-TG No. 125	S15838 MOM		Soyuz 11A511U	417	NIIP-5	LC1	NK9807-46
1985-052	1985 Jun 21 0745		1985-052A	Kosmos-1663	Resurs-F1 17F41 No. 55	S15840 MOM		Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1985-053	1985 Jun 21 1029?		1985-053	GVM	EPN	A05003 MO RF		Zenit-2	-	NIIP-5	-	RAEX
1985-054	1985 Jun 26 1235?		1985-054A	Kosmos-1664	Oblik	S15860 MOM		Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-055	1985 Jun 30 0044		1985-055A	Intelsat VA F11	Intelsat VA F11	S15873 Intelsat		Atlas G Centaur	AC-64	CC	LC36B	JCM
1985-056	1985 Jul 2 1123:13		1985-056A	Giotto	Giotto	S15875 ESA		Ariane 1	V14	CSG	ELA1	CNES32
1985-057	1985 Jul 3 1210?		1985-057A	Kosmos-1665	Oblik	S15877 MOM		Soyuz 11A511U	-	NIIP-53	-	RAEX

1985-058	1985 Jul 8 2340?	1985-058A	Kosmos-1666	Tselina-D	S15889 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1985-059	1985 Jul 10 0315	1985-059A	Kosmos-1667	Bion No. 7	S15891 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-34
1985-060	1985 Jul 15 0630?	1985-060A	Kosmos-1668	Oblik	S15906 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1985-061	1985 Jul 17 0105:00	1985-061A	Molniya-3	Molniya-3 No. 37	S15909 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1985-062	1985 Jul 19 1305:08	1985-062A	Kosmos-1669	Progress 7K-TG No. 126	S15918 MOM	Soyuz 11A511U	446	NIIP-5	LC1	NK9807-46
1985-063	1985 Jul 29 2100:00	1985-063A	Challenger	OV-099	S15925 NASA JSC	Space Shuttle	51-F	MLP2, KSC	LC39A	STSJSC
		1985-063	Spacelab 2 PLT	Spacelab 2	A03281 NASA MSFC					
		1985-063	Spacelab 2 PLT	Spacelab 2	A03282 NASA MSFC					
		1985-063	Spacelab 2 PLT	Spacelab 2	A03283 NASA MSFC					
		1985-063B	PDP	PDP	S15929 NASA MSFC					
		1985-063	CRNE	CRNE	A03284 NASA MSFC					
1985-064	1985 Aug 1 0536?	1985-064C	Kosmos-1670	US-A	S16196 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1985-065	1985 Aug 2 1140?	1985-065A	Kosmos-1671	Oblik	S15931 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-066	1985 Aug 3 0331:20	1985-066A	NNS O-24	NNS O-24	S15935 USN	Scout G-1	S209C	V	SLC5	LAAFB
		1985-066B	NNS O-30	NNS O-30	S15936 USN					
1985-067	1985 Aug 7 0950	1985-067A	Kosmos-1672	Resurs-F1 17F41 No. 57	S15940 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1985-068	1985 Aug 8 1019?	1985-068A	Kosmos-1673	Siluet No. 5	S15942 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1985-069	1985 Aug 8 1149?	1985-069A	Kosmos-1674	Tselina-D	S15944 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1985-070	1985 Aug 8 2101:00	1985-070A	Raduga	Gran' No. 26L	S15946 MOM	Proton-K/DM	317-02	NIIP-5	LC200/39	NK9810-25
1985-071	1985 Aug 12 1509	1985-071A	Kosmos-1675	Oko	S15952 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1985-072	1985 Aug 16 1510?	1985-072A	Kosmos-1676	Kobal't	S15959 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1985-072	Spuskaemiy Kapsula	SpK	A03296 MOM					
		1985-072	Spuskaemiy Kapsula	SpK	A03298 MOM					
1985-073	1985 Aug 18 2333	1985-073A	Suisai	PLANET-A	S15967 ISAS	Mu-3S-II	M-3S2-2	KASC	M1	SRJ
1985-074	1985 Aug 22 1928?	1985-074A	Molniya-1	Molniya-1	S15977 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1985-075	1985 Aug 23 2233?	1985-075B	Kosmos-1677	US-A	S16192 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1985-076	1985 Aug 27 1058:01	1985-076A	Discovery	OV-103	S15992 NASA JSC	Space Shuttle	51-I	MLP1, KSC	LC39A	STSJSC
		1985-076B	Aussat K1	Aussat K1	S15993 Aussat					
		1985-076C	ASC 1	ASC 1	S15994 ASC					
		1985-076D	Leasat 4	Leasat 4	S15995 HCI					
1985-F02	1985 Aug 28 2120	1985-F02	-	KH11-7 KENNAN	F00948 NRO/CIA	Titan 34D	34D-7 (04D-6)	V	SLC4E	LR850829
1985-077	1985 Aug 29 1015	1985-077A	Kosmos-1678	Resurs-F1 17F41 No. 53	S15997 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1985-078	1985 Aug 29 1133?	1985-078A	Kosmos-1679	Kobal't	S15999 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1985-078	Spuskaemiy Kapsula	SpK	A03300 MOM					
		1985-078	Spuskaemiy Kapsula	SpK	A03311 MOM					
1985-079	1985 Sep 4 0705?	1985-079A	Kosmos-1680	Strela-2	S16011 MO SSSR	Kosmos 11K65M	65011-241	NIIP-53	LC132/1	RAEX
1985-080	1985 Sep 6 1045	1985-080A	Kosmos-1681	Fram	S16018 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1985-F03	1985 Sep 12 2326:00	1985-F03	Eutelsat I F-3	ECS 3	F00951 Eutelsat	Ariane 3	V15	CSG	ELA1	CNES32
		1985-F03	Spacenet F3	Spacenet F3	F00953 GTE					
1985-081	1985 Sep 17 1238:52	1985-081A	Soyuz T-14	Soyuz 7K-ST No. 20L	S16051 MOM	Soyuz 11A511U2	007	NIIP-5	LC1/LC31?	VSA074
1985-082	1985 Sep 19 0132?	1985-082A	Kosmos-1682	US-P	S16054 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1985-083	1985 Sep 19 1010?	1985-083A	Kosmos-1683	Oblik	S16056 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-084	1985 Sep 24 0118:10	1985-084A	Kosmos-1684	Oko	S16064 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1985-085	1985 Sep 26 1115?	1985-085A	Kosmos-1685	Oblik	S16088 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1985-086	1985 Sep 27 0841:42	1985-086A	Kosmos-1686	TKS-M No. 16501	S16095 MOM	Proton-K	331-01	NIIP-5	LC200/39	NK9810-25
1985-087	1985 Sep 28 2336	1985-087A	Intelsat VA F12	Intelsat VA F12	S16101 Intelsat	Atlas G Centaur	AC-65	CC	LC36B	JCM
1985-088	1985 Sep 30 1923	1985-088A	Kosmos-1687	Oko	S16103 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1985-089	1985 Oct 2 0600?	1985-089A	Kosmos-1688	Romb	S16107 MO SSSR	Kosmos 11K65M	65044-153	GTsP-4	LC107	RAEX
		1985-089	Kosmos-1688 SS 1	ESO	A03312 MO SSSR					
		1985-089	Kosmos-1688 SS 2	ESO	A03313 MO SSSR					
		1985-089	Kosmos-1688 SS 3	ESO	A03314 MO SSSR					
		1985-089	Kosmos-1688 SS 4	ESO	A03315 MO SSSR					
		1985-089	Kosmos-1688 SS 5	ESO	A03316 MO SSSR					
		1985-089	Kosmos-1688 SS 6	ESO	A03317 MO SSSR					
		1985-089	Kosmos-1688 SS 7	ESO	A03318 MO SSSR					
		1985-089	Kosmos-1688 SS 8	ESO	A03319 MO SSSR					
		1985-089	Kosmos-1688 SS 9	ESO	A03320 MO SSSR					
		1985-089	Kosmos-1688 SS 10	ESO	A03321 MO SSSR					
		1985-089	Kosmos-1688 SS 11	ESO	A03322 MO SSSR					
		1985-089	Kosmos-1688 SS 12	ESO	A03323 MO SSSR					
		1985-089	Kosmos-1688 SS 13	ESO	A03324 MO SSSR					
		1985-089	Kosmos-1688 SS 14	ESO	A03325 MO SSSR					
		1985-089	Kosmos-1688 SS 15	ESO	A03326 MO SSSR					
		1985-089	Kosmos-1688 SS 16	ESO	A03327 MO SSSR					
		1985-089	Kosmos-1688 SS 17	ESO	A03328 MO SSSR					
		1985-089	Kosmos-1688 SS 18	ESO	A03329 MO SSSR					
		1985-089	Kosmos-1688 SS 19	ESO	A03330 MO SSSR					
		1985-089	Kosmos-1688 SS 20	ESO	A03331 MO SSSR					
		1985-089	Kosmos-1688 SS 21	ESO	A03332 MO SSSR					
		1985-089	Kosmos-1688 SS 22	ESO	A03333 MO SSSR					
		1985-089	Kosmos-1688 SS 23	ESO	A03334 MO SSSR					
		1985-089	Kosmos-1688 SS 24	ESO	A03335 MO SSSR					
1985-090	1985 Oct 3 0548	1985-090A	Kosmos-1689	Resurs-O1 No. 1L	S16110 MOM	Vostok 8A92M	-	NIIP-5	LC31	NK9422-46
1985-091	1985 Oct 3 0733:00	1985-091A	Molniya-3	Molniya-3 No. 38	S16112 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1985-092	1985 Oct 3 1515:30	1985-092A	Atlantis	OV-104	S16115 NASA JSC	Space Shuttle	51-J	MLP2, KSC	LC39A	STSJSC
		1985-092B	DSCS III B-4	DSCS III B-4	S16116 USAF					
		1985-092C	DSCS III B-5	DSCS III B-5	S16117 USAF					
1985-093	1985 Oct 9 0253	1985-093A	GPS 11	Navstar SVN 11	S16129 USAF	Atlas E/SGS-2	55E	V	SLC3W	JCM
1985-094	1985 Oct 9 2135?	1985-094A	Kosmos-1690	Strela-3	S16138 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
		1985-094B	Kosmos-1691	Strela-3	S16139 MO SSSR					
		1985-094C	Kosmos-1692	Strela-3	S16140 MO SSSR					
		1985-094D	Kosmos-1693	Strela-3	S16141 MO SSSR					

		1985-094E	Kosmos-1694	Strela-3	S16142	MO SSSR						
		1985-094F	Kosmos-1695	Strela-3	S16143	MO SSSR						
1985-095	1985 Oct 16 0925?	1985-095A	Kosmos-1696	Oblik	S16169	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX	
1985-096	1985 Oct 21 0504	1985-096A	FSW	FSW	S16177	MAI	Chang Zheng 2C	CZ2C-7 (12)	JQ	LA2B	MTR-4	
		1985-096	FSW RV	FSW RV	A03343	MAI						
1985-097	1985 Oct 22 0800?	1985-097A	Kosmos-1697	Tselina-2 GVM	S16181	MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX	
1985-098	1985 Oct 22 2024	1985-098A	Kosmos-1698	Oko	S16183	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48	
1985-099	1985 Oct 23 0042?	1985-099A	Molniya-1	Molniya-1	S16187	MOM	Molniya 8K78M	-	NIIP-5	-	RAEX	
1985-F04	1985 Oct 23 1724	1985-F04	Kosmos	Parus	F00957	MO SSSR	Kosmos 11K65M	65034-135	NIIP-53	LC133/3	JCM	
1985-100	1985 Oct 24 0230:00	1985-100A	Meteor-3	Meteor-3 No. 2	S16191	MO SSSR	Tsiklon-3	-	NIIP-53	-	NK9402-34	
1985-101	1985 Oct 25 1440?	1985-101A	Kosmos-1699	Kobal't	S16198	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
		1985-101	Spuskaemiy Kapsula	SpK	A03355	MOM						
		1985-101	Spuskaemiy Kapsula	SpK	A03369	MOM						
1985-102	1985 Oct 25 1545	1985-102A	Kosmos-1700	Al'tair No. 11L	S16199	MOM	Proton-K/DM-2	332-02	NIIP-5	LC200/40	NK9810-25	
1985-103	1985 Oct 28 1724?	1985-103A	Molniya-1	Molniya-1	S16220	MOM	Molniya 8K78M	-	NIIP-53	-	RAEX	
1985-104	1985 Oct 30 1700:00	1985-104A	Challenger	OV-099	S16230	NASA JSC	Space Shuttle	61-A	MLP1, KSC	LC39A	STSJSC	
		1985-104	Spacelab D-1	Spacelab Long Module	A03351	DFVLR						
		1985-104	USS	USS	A03352	DFVLR						
		1985-104B	GLOMR	GLOMR	S16231	USN						
1985-105	1985 Nov 9 0825	1985-105A	Kosmos-1701	Oko	S16235	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48	
1985-106	1985 Nov 13 1225?	1985-106A	Kosmos-1702	Oblik	S16247	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
1985-107	1985 Nov 15 1429:00	1985-107A	Raduga	Gran' No. 28L	S16250	MOM	Proton-K/DM	326-01	NIIP-5	LC200/39	NK9810-25	
1985-108	1985 Nov 22 2220?	1985-108A	Kosmos-1703	Tselina-D	S16262	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX	
1985-109	1985 Nov 27 0029:00	1985-109A	Atlantis	OV-104	S16273	NASA JSC	Space Shuttle	61-B	MLP2, KSC	LC39A	STSJSC	
		1985-109B	Morelos 2	Morelos 2	S16274	Morelos						
		1985-109C	Aussat K2	Aussat K2	S16275	Aussat						
		1985-109D	Satcom K2	Satcom K2	S16276	RCA Americom						
		1985-109E	OEX Target	OEX Target	S16277	NASA JSC						
		1985-109	EASE/ACCESS	EASE/ACCESS	A03365	NASA JSC						
1985-110	1985 Nov 28 1312?	1985-110A	Kosmos-1704	Parus	S16291	MO SSSR	Kosmos 11K65M	47122-346	NIIP-53	LC133/3	RAEX	
1985-111	1985 Dec 3 1215?	1985-111A	Kosmos-1705	Oblik	S16296	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
1985-112	1985 Dec 11 1440?	1985-112A	Kosmos-1706	Kobal't	S16306	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
		1985-112	Spuskaemiy Kapsula	SpK	A03371	MOM						
		1985-112	Spuskaemiy Kapsula	SpK	A03381	MOM						
1985-113	1985 Dec 12 1551?	1985-113A	Kosmos-1707	Tselina-D	S16326	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX	
1985-114	1985 Dec 13 0235	1985-114A	ITV 1	ITV 1	S16328	USAF	Scout G-1	S207C	WI	LA3A	LAAPFB	
		1985-114B	ITV 2	ITV 2	S16329	USAF						
		1985-114	ITV 1 Balloon	ITV 1 Balloon	A03372	USAF						
		1985-114D	ITV 1 Balloon	ITV 1 Balloon	S17247	USAF						
1985-115	1985 Dec 13 0745	1985-115A	Kosmos-1708	Resurs-F1 17F41 No. 56	S16331	MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29	
1985-116	1985 Dec 19 0846?	1985-116A	Kosmos-1709	Parus	S16368	MO SSSR	Kosmos 11K65M	65022-348	NIIP-53	LC132/1	RAEX	
1985-117	1985 Dec 24 1856	1985-117A	Molniya-3	Molniya-3 No. 40	S16393	MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26	
1985-118	1985 Dec 24 2143:28	1985-118A	Kosmos-1710	Uragan No. 22L	S16396	MOM	Proton-K/DM-2	334-02	NIIP-5	LC200/39	NK9810-25	
		1985-118B	Kosmos-1711	Uragan No. 23L	S16397	MOM						
		1985-118C	Kosmos-1712	Uragan GVM	S16398	MOM						
1985-119	1985 Dec 26 0150?	1985-119A	Meteor-2	Meteor-2	S16408	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX	
1985-120	1985 Dec 27 1706?	1985-120A	Kosmos-1713	Efir No. 2	S16429	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
1985-121	1985 Dec 28 0916?	1985-121A	Kosmos-1714	Tselina-2	S16434	MO RF	Zenit-2	-	NIIP-5	-	RAEX	
1986-001	1986 Jan 8 1125?	1986-001A	Kosmos-1715	Oblik	S16447	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
1986-002	1986 Jan 9 0248?	1986-002A	Kosmos-1716	Strela-1M	S16449	MO SSSR	Kosmos 11K65M	47122-337	NIIP-53	LC132/2?	RAEX	
		1986-002B	Kosmos-1717	Strela-1M	S16450	MO SSSR						
		1986-002C	Kosmos-1718	Strela-1M	S16451	MO SSSR						
		1986-002D	Kosmos-1719	Strela-1M	S16452	MO SSSR						
		1986-002E	Kosmos-1720	Strela-1M	S16453	MO SSSR						
		1986-002F	Kosmos-1721	Strela-1M	S16454	MO SSSR						
		1986-002G	Kosmos-1722	Strela-1M	S16455	MO SSSR						
		1986-002H	Kosmos-1723	Strela-1M	S16456	MO SSSR						
1986-003	1986 Jan 12 1155:00	1986-003A	Columbia	OV-102	S16481	NASA JSC	Space Shuttle	61-C	MLP1, KSC	LC39A	STSJSC	
		1986-003B	Satcom K1	Satcom K1	S16482	RCA Americom						
		1986-003	MSL-2	MSL-2	A03385	NASA GSFC						
		1986-003	GBA-1	GAS Bridge	A03386	NASA GSFC						
1986-004	1986 Jan 15 1420?	1986-004A	Kosmos-1724	Kobal't	S16490	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
		1986-004	Spuskaemiy Kapsula	SpK	A03393	MOM						
		1986-004	Spuskaemiy Kapsula	SpK	A03395	MOM						
1986-005	1986 Jan 16 1138?	1986-005A	Kosmos-1725	Parus	S16493	MO SSSR	Kosmos 11K65M	53744-152	NIIP-53	LC132/1	RAEX	
1986-006	1986 Jan 17 0721?	1986-006A	Kosmos-1726	Tselina-D	S16495	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX	
1986-007	1986 Jan 17 1020:00	1986-007A	Raduga	Gran' No. 29L	S16497	MOM	Proton-K/DM	331-02	NIIP-5	LC200/40	NK9810-25	
1986-008	1986 Jan 23 1852?	1986-008A	Kosmos-1727	Tsikada	S16510	MO SSSR	Kosmos 11K65M	47122-334	NIIP-53	LC132/1	RAEX	
1986-009	1986 Jan 28 0835?	1986-009A	Kosmos-1728	Oblik	S16512	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX	
1986-F01	1986 Jan 28 1638:00	1986-F01	Challenger	OV-099	F00959	NASA JSC	Space Shuttle	51-L	MLP2, KSC	LC39B	STSJSC	
		1986-F01	Spartan-Halley	Spartan 203	F00961	NASA GSFC						
		1986-F01	TDRS B	TDRS B	F00964	NASA GSFC						
1986-010	1986 Feb 1 1237	1986-010A	Shiyong Tongbu Tongxin Wx.	DPH-2	S16526	MAI	Chang Zheng 3	CZ3-3 (13)	XSC	LC1	JCM	
1986-011	1986 Feb 1 1811:56	1986-011A	Kosmos-1729	Oko	S16527	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48	
1986-012	1986 Feb 4 1115?	1986-012A	Kosmos-1730	Oblik	S16540	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX	
1986-013	1986 Feb 7 0845?	1986-013A	Kosmos-1731	Terilen	S16589	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX	
1986-014	1986 Feb 9 1006	1986-014A	USA-15	PARCAE	S16591	USN	Atlas H	6004H	V	SLC3E	JCM	
		1986-014E	USA-16	SSU	S16624	USN						
		1986-014F	USA-17	SSU	S16625	USN						
		1986-014H	USA-18	SSU	S16631	USN						
1986-015	1986 Feb 11 0656	1986-015A	Kosmos-1732	Musson	S16593	MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	PL39	
1986-016	1986 Feb 12 0755	1986-016A	Yuri 2B	BS 2B	S16597	NASDA	N-2	N-14(F)	TNSC	N	WWW-NASDA	

1986-017	1986 Feb 19 2128:23	1986-017A 1986-017DV	Mir MAK-1	DOS 7 (17K No. 127-01) MAK 1	S16609 MOM S21425 MOM	Proton-K	337-01	NIIP-5	LC200/39	NK9810-25
1986-018	1986 Feb 19 2304?	1986-018A	Kosmos-1733	Tselina-D	S16611 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1986-019	1986 Feb 22 0144:35	1986-019A 1986-019B	SPOT 1 Viking	SPOT 1 Viking	S16613 CNES S16614 SSC	Ariane 1	V16	CSG	ELA1	CNES32
1986-020	1986 Feb 26 1340?	1986-020A 1986-020 1986-020	Kosmos-1734 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK	S16618 MOM A03405 MOM A03413 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1986-021	1986 Feb 27 0144?	1986-021A	Kosmos-1735	US-P	S16620 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1986-022	1986 Mar 13 1233:09	1986-022A	Soyuz T-15	Soyuz 7K-ST No. 21L	S16643 MOM	Soyuz 11A511U2	012	NIIP-5	LC1	JCM
1986-023	1986 Mar 19 1008:25	1986-023A	Progress-25	Progress 7K-TG No. 134	S16645 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1986-024	1986 Mar 21 1005?	1986-024B	Kosmos-1736	US-A	S16806 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1986-025	1986 Mar 25 1926?	1986-025A	Kosmos-1737	US-P	S16648 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1986-F02	1986 Mar 26	1986-F02	[Kosmos]	Oblik??	F00966 MOM	Soyuz 11A511U	-	NIIP-5	-	AVMNLJ
1986-026	1986 Mar 28 2330:00	1986-026A 1986-026B	Gstar 2 Brasilsat 2	Gstar 2 SBTS 2	S16649 GTE S16650 Telebras	Ariane 3	V17	CSG	ELA2	CNES32
1986-027	1986 Apr 4 0345:00	1986-027A	Kosmos-1738	Geizer No. 13L	S16667 MOM	Proton-K/DM	302-01	NIIP-5	LC200/40	NK9422-47
1986-028	1986 Apr 9 0800?	1986-028A 1986-028 1986-028	Kosmos-1739 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK	S16677 MOM A03415 MOM A03421 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-029	1986 Apr 15 1140?	1986-029A	Kosmos-1740	Oblik	S16679 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1986-030	1986 Apr 17 2102?	1986-030A	Kosmos-1741	Strela-2	S16681 MO SSSR	Kosmos 11K65M	53726-198	NIIP-53	LC132/1	RAEX
1986-F03	1986 Apr 18 1745	1986-F03 1986-F03 1986-F03 1986-F03 1986-F03 1986-F03 1986-F03 1986-F03	- SRV-1 SRV-2 SRV-3 SRV-4	KH9-20 HEXAGON SS D 6 SRV-1 SRV-2 SRV-3 SRV-4	F00968 NRO/CIA F00969 USAF/NSA F00973 NRO F00975 NRO F00977 NRO F00979 NRO	Titan 34D	34D-9 (04D-2)	V	SLC4E	JCM
1986-031	1986 Apr 18 1950:02	1986-031A	Molniya-3	Molniya-3 No. 43	S16683 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1986-032	1986 Apr 23 1940:05	1986-032A	Progress-26	Progress 7K-TG No. 136	S16687 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1986-F04	1986 May 3 2318	1986-F04	GOES G	GOES G	F00983 NOAA	Delta 3914	D178	CC	LC17A	JCM
1986-033	1986 May 14 1240?	1986-033A	Kosmos-1742	Oblik	S16717 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1986-034	1986 May 15 0426?	1986-034A	Kosmos-1743	Tselina-D	S16719 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1986-035	1986 May 21 0821:51	1986-035A	Soyuz TM	Soyuz 7K-STM No. 51	S16722 MOM	Soyuz 11A511U2	-	NIIP-5	-	JCM
1986-036	1986 May 21 1630	1986-036A	Kosmos-1744	Foton No. 2L	S16724 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9721-34
1986-037	1986 May 23 1254?	1986-037A	Kosmos-1745	Parus	S16727 MO SSSR	Kosmos 11K65M	53772-362	NIIP-53	LC132/1	RAEX
1986-038	1986 May 24 0142	1986-038A	Ekran	Ekran No. 30L	S16729 MOM	Proton-K/DM	333-01	NIIP-5	LC200/39	NK9810-25
1986-039	1986 May 27 0930?	1986-039A	Meteor-2	Meteor-2	S16735 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1986-040	1986 May 28 0750	1986-040A	Kosmos-1746	Resurs-F1 17F41 No. 58	S16737 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1986-041	1986 May 29 0920?	1986-041A	Kosmos-1747	Oblik	S16745 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-F05	1986 May 31 0053:03	1986-F05	Intelsat VA F14	Intelsat VA F14	F00986 Intelsat	Ariane 2	V18	CSG	ELA1	CNES32
1986-042	1986 Jun 6 0357?	1986-042A 1986-042B 1986-042C 1986-042D 1986-042E 1986-042F 1986-042G 1986-042H	Kosmos-1748 Kosmos-1749 Kosmos-1750 Kosmos-1751 Kosmos-1752 Kosmos-1753 Kosmos-1754 Kosmos-1755	Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M	S16758 MO SSSR S16759 MO SSSR S16760 MO SSSR S16761 MO SSSR S16762 MO SSSR S16763 MO SSSR S16764 MO SSSR S16765 MO SSSR	Kosmos 11K65M	47172-364	NIIP-53	LC132/1	RAEX
1986-043	1986 Jun 6 1240?	1986-043A 1986-043 1986-043	Kosmos-1756 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK	S16767 MOM A03425 MOM A03433 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-044	1986 Jun 10 0049:00	1986-044A	Gorizont	Gorizont No. 24L	S16769 MOM	Proton-K/DM	322-02	NIIP-5	LC200/40	NK9602-24
1986-045	1986 Jun 11 0745	1986-045A	Kosmos-1757	Oblik (Priroda)	S16772 MOM	Soyuz 11A511U	-	NIIP-53	-	NK96-26-40
1986-046	1986 Jun 12 0443?	1986-046A	Kosmos-1758	Tselina-D	S16791 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1986-047	1986 Jun 18 2003?	1986-047A	Kosmos-1759	Parus	S16798 MO SSSR	Kosmos 11K65M	53722-341	NIIP-53	LC132/1	RAEX
1986-048	1986 Jun 19 1030?	1986-048A	Kosmos-1760	Oblik	S16800 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-049	1986 Jun 19 2109:00	1986-049A	Molniya-3	Molniya-3 No. 44	S16802 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1986-050	1986 Jul 5 0116:47	1986-050A	Kosmos-1761	Oko	S16849 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1986-051	1986 Jul 10 0800	1986-051A	Kosmos-1762	Resurs-F1 14F40 No. 59	S16855 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
1986-052	1986 Jul 16 0421?	1986-052A	Kosmos-1763	Strela-2	S16860 MO SSSR	Kosmos 11K65M	53722-365	NIIP-53	LC133/3	RAEX
1986-053	1986 Jul 17 1230?	1986-053A 1986-053 1986-053	Kosmos-1764 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK	S16861 MOM A03438 MOM A03440 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-054	1986 Jul 24 1230?	1986-054A	Kosmos-1765	Oblik	S16874 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1986-055	1986 Jul 28 2108	1986-055A	Kosmos-1766	Okman-01 1	S16881 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	NK9422-49
1986-056	1986 Jul 30 0830?	1986-056A	Kosmos-1767	GVM	S16883 MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX
1986-057	1986 Jul 30 1506?	1986-057A	Molniya-1	Molniya-1	S16885 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1986-058	1986 Aug 2 0920	1986-058A	Kosmos-1768	Resurs-F1 14F40 No. 60	S16890 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
1986-059	1986 Aug 4 0508?	1986-059A	Kosmos-1769	US-P	S16895 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1986-060	1986 Aug 6 1330?	1986-060A	Kosmos-1770	Terilen	S16897 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-061	1986 Aug 12 2045	1986-061A 1986-061B 1986-061C	Ajisai Fuji Jindai	EGP JAS-1 MABES	S16908 NASDA S16909 JARL S16910 NASDA	H-1	H-15 (F)	TNSC	N	WWW-NASDA
1986-062	1986 Aug 20 1258?	1986-062D	Kosmos-1771	US-A	S17036 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1986-063	1986 Aug 21 1104?	1986-063A	Kosmos-1772	Oblik	S16918 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1986-064	1986 Aug 27 1140?	1986-064A 1986-064 1986-064	Kosmos-1773 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK	S16920 MOM A03448 MOM A03456 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-065	1986 Aug 28 0802:43	1986-065A	Kosmos-1774	Oko	S16922 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1986-066	1986 Sep 3 0759?	1986-066A	Kosmos-1775	Oblik	S16926 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1986-067	1986 Sep 3 0900?	1986-067A	Kosmos-1776	Romb	S16928 MO SSSR	Kosmos 11K65M	65022-342	NIIP-53	LC132/1	RAEX

			1986-067G	Kosmos-1776 SS 1	ESO	S17258	MO SSSR							
			1986-067H	Kosmos-1776 SS 2	ESO	S17259	MO SSSR							
			1986-067J	Kosmos-1776 SS 3	ESO	S17260	MO SSSR							
			1986-067K	Kosmos-1776 SS 4	ESO	S17261	MO SSSR							
			1986-067L	Kosmos-1776 SS 5	ESO	S17334	MO SSSR							
			1986-067M	Kosmos-1776 SS 6	ESO	S17335	MO SSSR							
			1986-067N	Kosmos-1776 SS 7	ESO	S17356	MO SSSR							
			1986-067P	Kosmos-1776 SS 8	ESO	S17357	MO SSSR							
			1986-067Q	Kosmos-1776 SS 9	ESO	S17537	MO SSSR							
			1986-067R	Kosmos-1776 SS 10	ESO	S17538	MO SSSR							
			1986-067S	Kosmos-1776 SS 11	ESO	S18026	MO SSSR							
			1986-067T	Kosmos-1776 SS 12	ESO	S18027	MO SSSR							
			1986-067U	Kosmos-1776 SS 13	ESO	S18434	MO SSSR							
			1986-067V	Kosmos-1776 SS 14	ESO	S18435	MO SSSR							
			1986-067W	Kosmos-1776 SS 15	ESO	S18855	MO SSSR							
			1986-067X	Kosmos-1776 SS 16	ESO	S18856	MO SSSR							
			1986-067Y	Kosmos-1776 SS 17	ESO	S19375	MO SSSR							
			1986-067Z	Kosmos-1776 SS 18	ESO	S19376	MO SSSR							
			1986-067AA	Kosmos-1776 SS 19	ESO	S19410	MO SSSR							
			1986-067AB	Kosmos-1776 SS 20	ESO	S19411	MO SSSR							
			1986-067AC	Kosmos-1776 SS 21	ESO	S19545	MO SSSR							
			1986-067AD	Kosmos-1776 SS 22	ESO	S19546	MO SSSR							
			1986-067AE	Kosmos-1776 SS 23	ESO	S20272	MO SSSR							
			1986-067AF	Kosmos-1776 SS 24	ESO	S20273	MO SSSR							
1986-068	1986 Sep 5	0912?	1986-068A	Molniya-1	Molniya-1	S16934	MOM	Molniya 8K78M	-	NIIP-53	-	RAEX		
1986-069	1986 Sep 5	1508	1986-069B	Delta 180 Sensor Module	DM 43 Sensor Module	S16938	SDIO	Delta 3920	D180	CC	LC17B	JCM		
			1986-069A	Payload Adapter System	DM 43 PAS	S16937	SDIO							
1986-070	1986 Sep 10	0145?	1986-070A	Kosmos-1777	Strela-2	S16952	MO SSSR	Kosmos 11K65M	47196-164	NIIP-53	LC133/3	RAEX		
1986-071	1986 Sep 16	1138:09	1986-071A	Kosmos-1778	Uragan No. 24L	S16961	MOM	Proton-K/DM-2	336-01	NIIP-5	LC200/40	NK9810-25		
			1986-071B	Kosmos-1779	Uragan No. 25L	S16962	MOM							
			1986-071C	Kosmos-1780	Uragan No. 26L	S16963	MOM							
1986-072	1986 Sep 17	0759?	1986-072A	Kosmos-1781	Oblik	S16966	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX		
1986-073	1986 Sep 17	1552	1986-073A	NOAA 10	NOAA G	S16969	NOAA	Atlas E	52E	V	SLC3W	JCM		
1986-074	1986 Sep 30	1834?	1986-074A	Kosmos-1782	Tselina-D	S16986	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX		
1986-075	1986 Oct 3	1305:40	1986-075A	Kosmos-1783	Oko	S16993	MOM	Molniya 8K78M	-	NIIP-53	-	NK9701-29		
1986-076	1986 Oct 6	0540	1986-076A	FSW	FSW	S17001	MAI	Chang Zheng 2C	CZ2C-8 (14)	JQ	LA2B	MTR-4		
			1986-076	FSW RV	FSW RV	A03458	MAI							
1986-077	1986 Oct 6	0740?	1986-077A	Kosmos-1784	Siluet No. 6	S17003	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX		
1986-F06	1986 Oct 15		1986-F06	[Kosmos]	Strela-3	F00988	MO SSSR	Tsiklon-3	-	NIIP-53	-	AVMNLJ		
			1986-F06	[Kosmos]	Strela-3	F00989	MO SSSR							
			1986-F06	[Kosmos]	Strela-3	F00990	MO SSSR							
			1986-F06	[Kosmos]	Strela-3	F00991	MO SSSR							
			1986-F06	[Kosmos]	Strela-3	F00992	MO SSSR							
			1986-F06	[Kosmos]	Strela-3	F00993	MO SSSR							
1986-078	1986 Oct 15	0929:18	1986-078A	Kosmos-1785	Oko	S17031	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48		
1986-079	1986 Oct 20	0849	1986-079A	Molniya-3	Molniya-3 No. 41	S17038	MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26		
1986-080	1986 Oct 22	0800?	1986-080B	GVM	[FR7] GVM	S17043	MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX		
			1986-080A	Kosmos-1786	Yug	S17042	MO RF							
1986-081	1986 Oct 22	0900?	1986-081A	Kosmos-1787	Oblik	S17044	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX		
1986-082	1986 Oct 25	1543:00	1986-082A	Raduga	Gran' No. 30L	S17046	MOM	Proton-K/DM	335-02	NIIP-5	LC200/40	NK9810-25		
1986-083	1986 Oct 27	1240?	1986-083A	Kosmos-1788	Vektor	S17050	MO SSSR	Kosmos 11K65M	53748-411	NIIP-53	LC133/3	RAEX		
1986-084	1986 Oct 31	0800:00	1986-084A	Kosmos-1789	Resurs-F1 14F40 No. 61	S17054	MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29		
1986-085	1986 Nov 4	1150?	1986-085A	Kosmos-1790	Oblik	S17056	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX		
1986-086	1986 Nov 13	0610?	1986-086A	Kosmos-1791	Tsikada	S17066	MO SSSR	Kosmos 11K65M	53748-414	NIIP-53	LC132/2	RAEX		
1986-087	1986 Nov 13	1059?	1986-087A	Kosmos-1792	Kobal't	S17068	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX		
			1986-087	Spuskaemiy Kapsula	SpK	A03468	MOM							
			1986-087	Spuskaemiy Kapsula	SpK	A03475	MOM							
1986-088	1986 Nov 14	0023	1986-088A	Polar BEAR P87-1	NNS O-17	S17070	USAF STP	Scout G-1	S199C	V	SLC5	APL-TD8-3		
1986-089	1986 Nov 15	2134?	1986-089A	Molniya-1	Molniya-1	S17078	MOM	Molniya 8K78M	-	NIIP-53	-	RAEX		
1986-090	1986 Nov 18	1408:03	1986-090A	Gorizont	Gorizont No. 22L	S17083	MOM	Proton-K/DM	334-01	NIIP-5	LC200/39	NK9602-24		
1986-091	1986 Nov 20	1209:20	1986-091A	Kosmos-1793	Oko	S17134	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48		
1986-092	1986 Nov 21	0200?	1986-092A	Kosmos-1794	Strela-1M	S17138	MO SSSR	Kosmos 11K65M	53796-168	NIIP-53	LC132/2	RAEX		
			1986-092B	Kosmos-1795	Strela-1M	S17139	MO SSSR							
			1986-092C	Kosmos-1796	Strela-1M	S17140	MO SSSR							
			1986-092D	Kosmos-1797	Strela-1M	S17141	MO SSSR							
			1986-092E	Kosmos-1798	Strela-1M	S17142	MO SSSR							
			1986-092F	Kosmos-1799	Strela-1M	S17143	MO SSSR							
			1986-092G	Kosmos-1800	Strela-1M	S17144	MO SSSR							
			1986-092H	Kosmos-1801	Strela-1M	S17145	MO SSSR							
1986-093	1986 Nov 24	2143?	1986-093A	Kosmos-1802	Parus	S17159	MO SSSR	Kosmos 11K65M	47122-349	NIIP-53	LC132/2	RAEX		
1986-F07	1986 Nov 29	0800	1986-F07	[Kosmos]	Mech-K No. 303	F00995	MOM	Proton-K	338-01	NIIP-5	LC200/40	NK9810-25		
1986-094	1986 Dec 2	0700	1986-094A	Kosmos-1803	Musson	S17177	MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	PL39		
1986-095	1986 Dec 4	1010?	1986-095A	Kosmos-1804	Oblik	S17179	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX		
1986-096	1986 Dec 5	0230	1986-096A	FLTSATCOM F7	FLTSATCOM F7	S17181	USN	Atlas G Centaur	AC-66	CC	LC36B	JCM		
1986-097	1986 Dec 10	0730?	1986-097A	Kosmos-1805	Tselina-D	S17191	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX		
1986-098	1986 Dec 12	1835:36	1986-098A	Kosmos-1806	Oko	S17213	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48		
1986-099	1986 Dec 16	1400?	1986-099A	Kosmos-1807	Kobal't	S17217	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX		
			1986-099	Spuskaemiy Kapsula	SpK	A03477	MOM							
			1986-099	Spuskaemiy Kapsula	SpK	A03482	MOM							
1986-100	1986 Dec 17	1702?	1986-100A	Kosmos-1808	Parus	S17239	MO SSSR	Kosmos 11K65M	53772-353	NIIP-53	LC132/1	RAEX		
1986-101	1986 Dec 18	0800?	1986-101A	Kosmos-1809	AUOS-Z 501 Ionozond-E	S17241	MOM	Tsiklon-3	-	NIIP-53	-	RAEX		
1986-102	1986 Dec 26	1100?	1986-102A	Kosmos-1810	Terilen	S17262	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX		



1986-103	1986 Dec 26 1525?	1986-103A	Molniya-1	Molniya-1	S17264 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1987-001	1987 Jan 5 0120?	1987-001A	Meteor-2	Meteor-2	S17290 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1987-002	1987 Jan 9 1238?	1987-002A	Kosmos-1811	Kobal't	S17292 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1987-002	Spuskaemiy Kapsula	SpK	A03484 MOM					
		1987-002	Spuskaemiy Kapsula	SpK	A03521 MOM					
1987-003	1987 Jan 14 0905?	1987-003A	Kosmos-1812	Tselina-D	S17295 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1987-004	1987 Jan 15 1120?	1987-004A	Kosmos-1813	Oblik	S17297 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1987-005	1987 Jan 16 0606:23	1987-005A	Progress-27	Progress 7K-TG No. 135	S17299 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1987-006	1987 Jan 21 0910?	1987-006A	Kosmos-1814	Strela-2	S17303 MO SSSR	Kosmos 11K65M	47172-361	NIIP-53	LC132/2	RAEX
1987-007	1987 Jan 22 0700?	1987-007A	Kosmos-1815	Romb	S17326 MO SSSR	Kosmos 11K65M	65048-415	GTSP-4	LC107/1	RAEX
		1987-007	Kosmos-1815 SS 1	ESO	A03491 MO SSSR					
		1987-007	Kosmos-1815 SS 2	ESO	A03492 MO SSSR					
		1987-007	Kosmos-1815 SS 3	ESO	A03493 MO SSSR					
		1987-007	Kosmos-1815 SS 4	ESO	A03494 MO SSSR					
		1987-007	Kosmos-1815 SS 5	ESO	A03495 MO SSSR					
		1987-007	Kosmos-1815 SS 6	ESO	A03496 MO SSSR					
		1987-007	Kosmos-1815 SS 7	ESO	A03497 MO SSSR					
		1987-007	Kosmos-1815 SS 8	ESO	A03498 MO SSSR					
		1987-007	Kosmos-1815 SS 9	ESO	A03499 MO SSSR					
		1987-007	Kosmos-1815 SS 10	ESO	A03500 MO SSSR					
		1987-007	Kosmos-1815 SS 11	ESO	A03501 MO SSSR					
		1987-007	Kosmos-1815 SS 12	ESO	A03502 MO SSSR					
		1987-007	Kosmos-1815 SS 13	ESO	A03503 MO SSSR					
		1987-007	Kosmos-1815 SS 14	ESO	A03504 MO SSSR					
		1987-007	Kosmos-1815 SS 15	ESO	A03505 MO SSSR					
		1987-007	Kosmos-1815 SS 16	ESO	A03506 MO SSSR					
		1987-007	Kosmos-1815 SS 17	ESO	A03507 MO SSSR					
		1987-007	Kosmos-1815 SS 18	ESO	A03508 MO SSSR					
		1987-007	Kosmos-1815 SS 19	ESO	A03509 MO SSSR					
		1987-007	Kosmos-1815 SS 20	ESO	A03510 MO SSSR					
		1987-007	Kosmos-1815 SS 21	ESO	A03511 MO SSSR					
		1987-007	Kosmos-1815 SS 22	ESO	A03512 MO SSSR					
		1987-007	Kosmos-1815 SS 23	ESO	A03513 MO SSSR					
		1987-007	Kosmos-1815 SS 24	ESO	A03514 MO SSSR					
1987-008	1987 Jan 22 1606:00	1987-008A	Molniya-3	Molniya-3 No. 42	S17328 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1987-009	1987 Jan 29 0614?	1987-009A	Kosmos-1816	Tsikada	S17359 MO SSSR	Kosmos 11K65M	65096-172	NIIP-53	LC132/2	RAEX
1987-010	1987 Jan 30 0919	1987-010A	Kosmos-1817	Ekran-M No. 11L	S17365 MOM	Proton-K/DM-2	341-01	NIIP-5	LC200/40	NK9810-25
1987-011	1987 Feb 1 2330?	1987-011A	Kosmos-1818	Plasma-A No. 1	S17369 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1987-012	1987 Feb 5 0630	1987-012A	Ginga	ASTRO-C	S17480 ISAS	Mu-3S-II	M-3S2-3	KASC	M1	SRJ
1987-013	1987 Feb 5 2138:15	1987-013A	Soyuz TM-2	Soyuz 7K-STM No. 52	S17482 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9703-56
1987-014	1987 Feb 7 1030?	1987-014A	Kosmos-1819	Oblik	S17484 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1987-015	1987 Feb 12 0640	1987-015A	USA 21	SDS 7	S17506 NRO/USAF	Titan 34B	34B-51 (3B-66)	V	SLC4W	LR870212
1987-016	1987 Feb 14 0830?	1987-016A	Kosmos-1820	{FR7} GVM	S17523 MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX
1987-017	1987 Feb 18 1353?	1987-017A	Kosmos-1821	Parus	S17525 MO SSSR	Kosmos 11K65M	65072-354	NIIP-53	LC132/2	RAEX
1987-018	1987 Feb 19 0123	1987-018A	Momo	MOS-1	S17527 NASDA	N-2	N-16 (F)	TNSC	N	WW-NASDA
1987-019	1987 Feb 19 1015?	1987-019A	Kosmos-1822	Oblik	S17533 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1987-020	1987 Feb 20 0443	1987-020A	Kosmos-1823	Musson	S17535 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2	PL39
1987-021	1987 Feb 26 1330?	1987-021A	Kosmos-1824	Kobal't	S17559 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1987-021	Spuskaemiy Kapsula	SpK	A03531 MOM					
		1987-021	Spuskaemiy Kapsula	SpK	A03538 MOM					
1987-022	1987 Feb 26 2305	1987-022A	GOES 7	GOES H	S17561 NOAA	Delta 3914	D179	CC	LC17A	JCM
1987-023	1987 Mar 3 1114:05	1987-023A	Progress-28	Progress 7K-TG No. 137	S17564 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1987-024	1987 Mar 3 1503?	1987-024A	Kosmos-1825	Tselina-D	S17566 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1987-025	1987 Mar 11 1025?	1987-025A	Kosmos-1826	Oblik	S17577 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1987-026	1987 Mar 13 1311?	1987-026A	Kosmos-1827	Strela-3	S17582 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
		1987-026B	Kosmos-1828	Strela-3	S17583 MO SSSR					
		1987-026C	Kosmos-1829	Strela-3	S17584 MO SSSR					
		1987-026D	Kosmos-1830	Strela-3	S17585 MO SSSR					
		1987-026E	Kosmos-1831	Strela-3	S17586 MO SSSR					
		1987-026F	Kosmos-1832	Strela-3	S17587 MO SSSR					
1987-027	1987 Mar 18 0830?	1987-027A	Kosmos-1833	Tselina-2 GVM	S17589 MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX
1987-028	1987 Mar 19 0354:00	1987-028A	Raduga	Gran' No. 31L	S17611 MOM	Proton-K/DM	323-01	NIIP-5	LC200/40	NK9810-25
1987-029	1987 Mar 20 2222	1987-029A	Palapa B2P	Palapa B2P	S17706 Perumtel	Delta 3920/PAM	D182	CC	LC17B	JCM
1987-F01	1987 Mar 24	1987-F01	SIROSS-A	SIROSS-A	F00997 ISRO	ASLV	ASLV-D1	SHAR	SLV	Wire
1987-F02	1987 Mar 26 2122	1987-F02	FLTSATCOM F6	FLTSATCOM F6	F00999 USN	Atlas G Centaur	AC-67	CC	LC36B	JCM
1987-030	1987 Mar 31 0016:16	1987-030C	FSB	FSB No. 16601	S17851 MOM	Proton-K	336-02	NIIP-5	LC200/39	NK9707-75
		1987-030A	Kvant	TsM-e 37Ke No. 010	S17845 MOM					
1987-031	1987 Apr 8 0351?	1987-031A	Kosmos-1834	US-P	S17847 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1987-032	1987 Apr 9 1144?	1987-032A	Kosmos-1835	Kobal't	S17849 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1987-032	Spuskaemiy Kapsula	SpK	A03540 MOM					
		1987-032	Spuskaemiy Kapsula	SpK	A03548 MOM					
1987-033	1987 Apr 16 0618?	1987-033A	Kosmos-1836	Terilen	S17876 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1987-034	1987 Apr 21 1514:17	1987-034A	Progress-29	Progress 7K-TG No. 127	S17878 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1987-035	1987 Apr 22 0910?	1987-035A	Kosmos-1837	Oblik	S17880 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1987-036	1987 Apr 24 1242:54	1987-036A	Kosmos-1838	Uragan No. 30L	S17902 MOM	Proton-K/DM-2	335-01	NIIP-5	LC200/40	NK9810-25
		1987-036B	Kosmos-1839	Uragan No. 31L	S17903 MOM					
		1987-036C	Kosmos-1840	Uragan No. 32L	S17904 MOM					
1987-037	1987 Apr 24 1659:59	1987-037A	Kosmos-1841	Foton No. 3L	S17907 MOM	Soyuz 11A511U	-	NIIP-53	-	NK9721-34
1987-038	1987 Apr 27 0000?	1987-038A	Kosmos-1842	Tselina-D	S17911 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1987-039	1987 May 5 0915?	1987-039A	Kosmos-1843	Oblik	S17940 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1987-040	1987 May 11 1445	1987-040A	Gorizont	Gorizont No. 23L	S17969 MOM	Proton-K/DM	338-02	NIIP-5	LC200/39	NK9602-24
1987-041	1987 May 13 0540?	1987-041A	Kosmos-1844	Tselina-2	S17973 MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX



1987-042	1987 May 13	0600?	1987-042A	Kosmos-1845	Oblik	S17975 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX	
1987-043	1987 May 15	1545	1987-043A	USA-22	PARCAE	S17997 USN	Atlas H	6005H	V	SLC3E	JCM	
			1987-043E	USA-23	SSU	S18009 USN						
			1987-043F	USA-24	SSU	S18010 USN						
			1987-043H	USA-25	SSU	S18025 USN						
			1987-043C	LIPS 3	LIPS 3	S18007 USN						
1987-F03	1987 May 15	1730:01	1987-F03	FSB	FSB	F01001 MOM	Energiya	6SL		NIIP-5	LC250	Energiya
			1987-F03	Polyus	Skif-DM	F01002 MOM						
1987-044	1987 May 19	0402:10	1987-044A	Progress-30	Progress 7K-TG No. 128	S17999 MOM	Soyuz 11A511U2	-		NIIP-5	-	NK9807-46
1987-045	1987 May 21	0744:59	1987-045A	Kosmos-1846	Resurs-F1 14F40 No. 104	S18004 MOM	Soyuz 11A511U	-		NIIP-53	LC43/4	NK95-20-29
1987-046	1987 May 26	1339?	1987-046A	Kosmos-1847	Kobal't	S18011 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
			1987-046	Spuskaemiy Kapsula	SpK	A03555 MOM						
			1987-046	Spuskaemiy Kapsula	SpK	A03561 MOM						
1987-047	1987 May 28	1244?	1987-047A	Kosmos-1848	Oblik	S18017 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1987-048	1987 Jun 4	1850:23	1987-048A	Kosmos-1849	Oko	S18083 MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48
1987-049	1987 Jun 9	1445?	1987-049A	Kosmos-1850	Strela-2	S18095 MO SSSR	Kosmos 11K65M	47196-176		NIIP-53	LC132/1	RAEX
1987-050	1987 Jun 12	0740:28	1987-050A	Kosmos-1851	Oko	S18103 MOM	Molniya 8K78M	-		NIIP-53	-	NK9715-48
1987-051	1987 Jun 16	1751?	1987-051A	Kosmos-1852	Strela-1M	S18113 MO SSSR	Kosmos 11K65M	65026-184		NIIP-53	LC132/1	RAEX
			1987-051B	Kosmos-1853	Strela-1M	S18114 MO SSSR						
			1987-051C	Kosmos-1854	Strela-1M	S18115 MO SSSR						
			1987-051D	Kosmos-1855	Strela-1M	S18116 MO SSSR						
			1987-051E	Kosmos-1856	Strela-1M	S18117 MO SSSR						
			1987-051F	Kosmos-1857	Strela-1M	S18118 MO SSSR						
			1987-051G	Kosmos-1858	Strela-1M	S18119 MO SSSR						
			1987-051H	Kosmos-1859	Strela-1M	S18120 MO SSSR						
1987-F04	1987 Jun 18	0724:59	1987-F04	[Kosmos]	Resurs-F1 14F40 No. 105	F01004 MOM	Soyuz 11A511U	77015-105		NIIP-53	LC43/3	NK95-20-29
1987-052	1987 Jun 18	2133?	1987-052C	Kosmos-1860	US-A	S18240 MO SSSR	Tsiklon-2	-		NIIP-5	-	RAEX
1987-053	1987 Jun 20	0234	1987-053A	DMSP F8	DMSP S-9	S18123 USAF	Atlas E	59E		V	SLC3W	JCM
1987-054	1987 Jun 23	0737?	1987-054A	Kosmos-1861	Tsikada/RS-10/RS-11	S18129 MO SSSR	Kosmos 11K65M	65026-202		NIIP-53	LC132/1	RAEX
1987-055	1987 Jul 1	1935?	1987-055A	Kosmos-1862	Tselina-D	S18152 MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX
1987-056	1987 Jul 4	1225?	1987-056A	Kosmos-1863	Oblik	S18155 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1987-057	1987 Jul 6	2159?	1987-057A	Kosmos-1864	Parus	S18160 MO SSSR	Kosmos 11K65M	53796-177		NIIP-53	LC132/2	RAEX
1987-058	1987 Jul 8	1059?	1987-058A	Kosmos-1865	Siluet No. 7	S18162 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX
1987-059	1987 Jul 9	1610?	1987-059A	Kosmos-1866	Kobal't	S18184 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
			1987-059	Spuskaemiy Kapsula	SpK	A03563 MOM						
			1987-059	Spuskaemiy Kapsula	SpK	A03565 MOM						
1987-060	1987 Jul 10	1535?	1987-060A	Kosmos-1867	Plasma-A No. 2	S18187 MO SSSR	Tsiklon-2	-		NIIP-5	-	RAEX
1987-061	1987 Jul 14	1400?	1987-061A	Kosmos-1868	Yug	S18192 MO SSSR	Kosmos 11K65M	47196-161		NIIP-53	LC132/2	RAEX
1987-062	1987 Jul 16	0425:00	1987-062A	Kosmos-1869	Okean-O1 2	S18214 MO SSSR	Tsiklon-3	-		NIIP-53	LC32/2	NK9422-49
1987-063	1987 Jul 22	0159:17	1987-063A	Soyuz TM-3	Soyuz 7K-STM No. 53	S18222 MOM	Soyuz 11A511U2	-		NIIP-5	-	JCM
1987-064	1987 Jul 25	0900:00	1987-064A	Kosmos-1870	Mech-K No. 304	S18225 MOM	Proton-K	-		NIIP-5	LC200/40	NK9810-25
1987-065	1987 Aug 1	0359?	1987-065A	Kosmos-1871	[FR7] GVM	S18259 MO RF	Zenit-2	-		NIIP-5	LC45/1	RAEX
1987-066	1987 Aug 3	2044:11	1987-066A	Progress-31	Progress 7K-TG No. 138	S18283 MOM	Soyuz 11A511U2	-		NIIP-5	-	NK9807-46
1987-067	1987 Aug 5	0639	1987-067A	FSW	FSW	S18306 MAI	Chang Zheng 2C	CZ2C-9 (15)	JQ	LA2B	MTR-4	
			1987-067	FSW RV	FSW RV	A03573 MAI						
1987-068	1987 Aug 18	0227?	1987-068A	Meteor-2	Meteor-2	S18312 MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX
1987-069	1987 Aug 19	0659?	1987-069A	Kosmos-1872	Oblik	S18314 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1987-070	1987 Aug 27	0920	1987-070A	Kiku 5	ETS-5	S18316 NASDA	H-1	H-17(F)		TNSC	N	WWW-NASDA
1987-071	1987 Aug 28	0820?	1987-071A	Kosmos-1873	[FR7] GVM	S18318 MO RF	Zenit-2	-		NIIP-5	LC45/1	RAEX
1987-072	1987 Sep 3	1025?	1987-072A	Kosmos-1874	Oblik	S18326 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
1987-073	1987 Sep 3	1926:00	1987-073A	Ekran	Ekran No. 29L	S18328 MOM	Proton-K/DM	337-02		NIIP-5	LC200/39	NK9810-25
1987-074	1987 Sep 7	2350?	1987-074A	Kosmos-1875	Strela-3	S18334 MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX
			1987-074B	Kosmos-1876	Strela-3	S18335 MO SSSR						
			1987-074C	Kosmos-1877	Strela-3	S18336 MO SSSR						
			1987-074D	Kosmos-1878	Strela-3	S18337 MO SSSR						
			1987-074E	Kosmos-1879	Strela-3	S18338 MO SSSR						
			1987-074F	Kosmos-1880	Strela-3	S18339 MO SSSR						
1987-075	1987 Sep 9	0715	1987-075A	FSW-1	FSW-1	S18341 MAI	Chang Zheng 2C	CZ2C-10 (16)	JQ	LA2B	MTR-4	
			1987-075	FSW RV	FSW RV	A03579 MAI						
1987-076	1987 Sep 11	0206?	1987-076A	Kosmos-1881	Terilen	S18343 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX
1987-077	1987 Sep 15	1030	1987-077A	Kosmos-1882	Resurs-F1 14F40 No. 107	S18348 MOM	Soyuz 11A511U	-		NIIP-53	LC43/4	NK95-20-29
1987-078	1987 Sep 16	0045:28	1987-078A	Aussat K3	Aussat K3	S18350 Aussat	Ariane 3	V19		CSG	ELA1	CNES32
			1987-078B	Eutelsat I F4	Eutelsat I F4	S18351 Eutelsat						
1987-079	1987 Sep 16	0253:31	1987-079A	Kosmos-1883	Uragan No. 33L	S18355 MOM	Proton-K/DM-2	339-02		NIIP-5	LC200/40	NK9810-25
			1987-079B	Kosmos-1884	Uragan No. 34L	S18356 MOM						
			1987-079C	Kosmos-1885	Uragan No. 35L	S18357 MOM						
1987-080	1987 Sep 16	1922	1987-080A	NNS O-27	NNS O-27	S18361 USN	Scout G-1	S204C		V	SLC5	JCM
			1987-080B	NNS O-29	NNS O-29	S18362 USN						
1987-081	1987 Sep 17	1459?	1987-081A	Kosmos-1886	Kobal't	S18366 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
			1987-081	Spuskaemiy Kapsula	SpK	A03589 MOM						
			1987-081	Spuskaemiy Kapsula	SpK	A03591 MOM						
1987-082	1987 Sep 23	2343:54	1987-082A	Progress-32	Progress 7K-TG No. 139	S18376 MOM	Soyuz 11A511U2	-		NIIP-5	-	NK9807-46
1987-083	1987 Sep 29	1250	1987-083A	Kosmos-1887	Bion No. 8	S18380 MOM	Soyuz 11A511U	-		NIIP-53	-	NK96-26-34
1987-084	1987 Oct 1	1709:00	1987-084A	Kosmos-1888	Geizer No. 15L	S18384 MOM	Proton-K/DM-2	328-02		NIIP-5	LC200/39	NK9422-47
1987-085	1987 Oct 9	0830?	1987-085A	Kosmos-1889	Oblik	S18394 MOM	Soyuz 11A511U	-		NIIP-5	-	RAEX
1987-086	1987 Oct 10	2148?	1987-086A	Kosmos-1890	US-P	S18396 MO SSSR	Tsiklon-2	-		NIIP-5	-	RAEX
1987-087	1987 Oct 14	1235?	1987-087A	Kosmos-1891	Parus	S18402 MO SSSR	Kosmos 11K65M	53726-186		NIIP-53	LC133/3	RAEX
1987-088	1987 Oct 20	0909?	1987-088A	Kosmos-1892	Tselina-D	S18421 MO SSSR	Tsiklon-3	-		NIIP-53	-	RAEX
1987-089	1987 Oct 22	1425?	1987-089A	Kosmos-1893	Kobal't	S18432 MOM	Soyuz 11A511U	-		NIIP-53	-	RAEX
			1987-089	Spuskaemiy Kapsula	SpK	A03598 MOM						
			1987-089	Spuskaemiy Kapsula	SpK	A03606 MOM						
1987-090	1987 Oct 26	2132	1987-090A	USA 27	KH11-8 KENNAN	S18441 NRO/CIA	Titan 34D	34D-15 (04D-8)	V	SLC4E	JCM	

1987-091	1987 Oct 28 1515:00	1987-091A	Kosmos-1894	Oko	S18443 MOM	Proton-K/DM-2	325-01	NIIP-5	LC200/40	NK9810-25
1987-092	1987 Nov 11 0904?	1987-092A	Kosmos-1895	Oblik	S18491 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1987-093	1987 Nov 14 0929?	1987-093A	Kosmos-1896	Kometa No. 8	S18535 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1987-094	1987 Nov 20 2347:12	1987-094A	Progress-33	Progress 7K-TG No. 140	S18568 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1987-095	1987 Nov 21 0219:00	1987-095A	TV-SAT	TV-SAT	S18570 Bundespost	Ariane 2	V20	CSG	ELA2	CNES32
1987-096	1987 Nov 26 1328:00	1987-096A	Kosmos-1897	Al'tair No. 12L	S18575 MOM	Proton-K/DM-2	330-01	NIIP-5	LC200/39	NK9810-25
1987-097	1987 Nov 29 0328	1987-097A	DSP F13	DSP 5R	S18583 USAF	Titan 34D/Transtage	34D-8 (05D-4)	CC	LC40	JCM
1987-098	1987 Dec 1 1415?	1987-098A	Kosmos-1898	Strela-2	S18585 MO SSSR	Kosmos 11K65M	65035-621	NIIP-53	LC133/3?	RAEX
1987-099	1987 Dec 7 0850?	1987-099A	Kosmos-1899	Oblik	S18625 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1987-100	1987 Dec 10 1130:00	1987-100A	Raduga	Gran' No. 32L	S18631 MOM	Proton-K/DM-2	343-01	NIIP-5	LC200/40	NK9810-25
1987-101	1987 Dec 12 0540?	1987-101	Kosmos-1900	US-A	A03726 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1987-102	1987 Dec 14 1129?	1987-102A	Kosmos-1901	Kobal't	S18666 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1987-102	Spuskaemiy Kapsula	SpK	A03608 MOM					
		1987-102	Spuskaemiy Kapsula	SpK	A03486 MOM					
1987-103	1987 Dec 15 1330?	1987-103A	Kosmos-1902	Vektor	S18668 MO SSSR	Kosmos 11K65M	53726-183	NIIP-53	LC133/3	RAEX
1987-104	1987 Dec 21 1118:03	1987-104A	Soyuz TM-4	Soyuz 7K-STM No. 54	S18699 MOM	Soyuz 11A511U2	-	NIIP-5	-	JCM
1987-105	1987 Dec 21 2235:42	1987-105A	Kosmos-1903	Oko	S18701 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1987-106	1987 Dec 23 2022?	1987-106A	Kosmos-1904	Parus	S18709 MO SSSR	Kosmos 11K65M	53711-281	NIIP-53	LC133/3	RAEX
1987-107	1987 Dec 25 0845?	1987-107A	Kosmos-1905	Oblik	S18711 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1987-108	1987 Dec 26 1130	1987-108A	Kosmos-1906	Resurs-F2 17F42 No. 1	S18713 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
1987-109	1987 Dec 27 1125:00	1987-109A	Ekran-M	Ekran-M No. 13L	S18715 MOM	Proton-K/DM-2	345-01	NIIP-5	LC200/39	NK9810-25
1987-110	1987 Dec 29 1140?	1987-110A	Kosmos-1907	Oblik	S18720 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-001	1988 Jan 6 0741?	1988-001A	Kosmos-1908	Tselina-D	S18748 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1988-002	1988 Jan 15 0349?	1988-002A	Kosmos-1909	Strela-3	S18788 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
		1988-002B	Kosmos-1910	Strela-3	S18789 MO SSSR					
		1988-002C	Kosmos-1911	Strela-3	S18790 MO SSSR					
		1988-002D	Kosmos-1912	Strela-3	S18791 MO SSSR					
		1988-002E	Kosmos-1913	Strela-3	S18792 MO SSSR					
		1988-002F	Kosmos-1914	Strela-3	S18793 MO SSSR					
1988-F01	1988 Jan 18 0958:00	1988-F01	Gorizont	Gorizont No. 25L	F01013 MOM	Proton-K/DM-2	341-02	NIIP-5	LC200/40	NK9602-24
1988-003	1988 Jan 20 2251:54	1988-003A	Progress-34	Progress 7K-TG No. 142	S18795 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1988-004	1988 Jan 26 1120?	1988-004A	Kosmos-1915	Oblik	S18809 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-005	1988 Jan 30 1100?	1988-005A	Meteor-2	Meteor-2	S18820 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1988-006	1988 Feb 3 0553	1988-006A	DMSP F9	DMSP S-8	S18822 USAF	Atlas E	54E	V	SLC3W	LR880203
1988-007	1988 Feb 3 1215?	1988-007A	Kosmos-1916	Kobal't	S18823 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1988-007	Spuskaemiy Kapsula	SpK	A03625 MOM					
		1988-007	Spuskaemiy Kapsula	SpK	A03627 MOM					
1988-008	1988 Feb 8 2208	1988-008B	Delta 181 Sensor Module	Thrusted V. Sensor Module	S18848 SDIO	Delta 3910	D181	CC	LC17B	JCM
		1988-008A	Delta 181 Canister Cluster	Canister Cluster	S18847 SDIO					
		1988-008	SPX	SPX	A03629 SDIO					
		1988-008	Delta 181 Subsatellite 1	Group 1 Test Object	A03630 SDIO					
		1988-008	Delta 181 Subsatellite 2	Group 1 Test Object	A03631 SDIO					
		1988-008	Delta 181 Subsatellite 3	Group 1 Test Object	A03632 SDIO					
		1988-008	Delta 181 Subsatellite 4	Group 1 Test Object	A03633 SDIO					
		1988-008	Delta 181 Subsatellite 5	Group 1 Test Object	A03634 SDIO					
		1988-008	Sensor Cal Ref. Subsat	Group 1 Cal Object	A03635 SDIO					
		1988-008	Delta 181 Subsatellite 7	Group 2 Test Object	A03636 SDIO					
		1988-008	Delta 181 Subsatellite 8	Group 2 Test Object	A03638 SDIO					
		1988-008	Delta 181 Subsatellite 9	Group 2 Test Object	A03639 SDIO					
		1988-008	Delta 181 Subsatellite 10	Group 2 Test Object	A03640 SDIO					
		1988-008	Delta 181 Subsatellite 11	Group 2 Test Object	A03641 SDIO					
		1988-008	Solid Motor Subsatellite	Group 2 Test Object	A03642 SDIO					
1988-009	1988 Feb 17 0023:22	1988-009A	Kosmos-1917	Uragan No. 38L	A03651 MOM	Proton-K/DM-2	346-02	NIIP-5	LC200/39	NK9810-25
		1988-009A	Kosmos-1918	Uragan No. 37L	A03652 MOM					
		1988-009A	Kosmos-1919	Uragan No. 36L	S18857 MOM					
1988-010	1988 Feb 18 0950	1988-010A	Kosmos-1920	Resurs-F1 14F40 No. 106	S18860 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
1988-011	1988 Feb 19 0800?	1988-011A	Kosmos-1921	Oblik	S18875 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-012	1988 Feb 19 1005	1988-012A	Sakura 3A	CS-3A	S18877 NASDA/TCSJ	H-1	H-18 (F)	TNSC	N	WWW-NASDA
1988-013	1988 Feb 26 0931:12	1988-013A	Kosmos-1922	Oko	S18881 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1988-014	1988 Mar 7 1241	1988-014A	DFH 2-1	DFH 2A	S18922 Chinaset	Chang Zheng 3	CZ3-4 (17)	XSC	LC1	PSC/C/89-1
1988-015	1988 Mar 10 1030?	1988-015A	Kosmos-1923	Oblik	S18931 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-016	1988 Mar 11 0018?	1988-016A	Kosmos-1924	Strela-1M	S18937 MO SSSR	Kosmos 11K65M	47161-263	NIIP-53	LC132/1	RAEX
		1988-016B	Kosmos-1925	Strela-1M	S18938 MO SSSR					
		1988-016C	Kosmos-1926	Strela-1M	S18939 MO SSSR					
		1988-016D	Kosmos-1927	Strela-1M	S18940 MO SSSR					
		1988-016E	Kosmos-1928	Strela-1M	S18941 MO SSSR					
		1988-016F	Kosmos-1929	Strela-1M	S18942 MO SSSR					
		1988-016G	Kosmos-1930	Strela-1M	S18943 MO SSSR					
		1988-016H	Kosmos-1931	Strela-1M	S18944 MO SSSR					
1988-017	1988 Mar 11 0638?	1988-017A	Molniya-1	Molniya-1	S18946 MOM	Molniya 8K78M	-	NIIP-5	-	RAEX
1988-018	1988 Mar 11 2328:00	1988-018B	Telecom 1C	Telecom 1C	S18952 France Tel	Ariane 3	V21	CSG	ELA1	CNES32
		1988-018A	Spacenet 3R	Spacenet 3R	S18951 GTE					
1988-019	1988 Mar 14 1421?	1988-019B	Kosmos-1932	US-A	S19160 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1988-020	1988 Mar 15 1850?	1988-020A	Kosmos-1933	Tselina-D	S18958 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1988-021	1988 Mar 17 0643?	1988-021A	IRS-1A	IRS-1A	S18960 ISRO	Vostok 8A92M	-	NIIP-5	LC31	RAEX
1988-022	1988 Mar 17 2055?	1988-022A	Molniya-1	Molniya-1	S18980 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1988-023	1988 Mar 22 1407?	1988-023A	Kosmos-1934	Parus	S18985 MO SSSR	Kosmos 11K65M	47111-221	NIIP-53	LC132/1	RAEX
1988-024	1988 Mar 23 2105:12	1988-024A	Progress-35	Progress 7K-TG No. 143	S18992 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1988-025	1988 Mar 24 1410?	1988-025A	Kosmos-1935	Kobal't	S19011 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1988-025	Spuskaemiy Kapsula	SpK	A03664 MOM					
		1988-025	Spuskaemiy Kapsula	SpK	A03666 MOM					
1988-026	1988 Mar 25 2150	1988-026A	San Marco 5	San Marco D/L	S19013 ASI	Scout G-1	S206C	SMLC		TRWSL-24

1988-027	1988 Mar 30 1200?	1988-027A	Kosmos-1936	Terilen	S19015 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-028	1988 Mar 31 0418:00	1988-028A	Gorizont	Gorizont No. 26L	S19017 MOM	Proton-K/DM	343-02	NIIP-5	LC200/40	NK9602-24
1988-029	1988 Apr 5 1441?	1988-029A	Kosmos-1937	Strela-2	S19038 MO SSSR	Kosmos 11K65M	47126-188	NIIP-53	LC133/3	RAEX
1988-030	1988 Apr 11 1115?	1988-030A	Kosmos-1938	Oblik	S19041 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-031	1988 Apr 14 1700:00	1988-031A	Foton	Foton No. 4L	S19043 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	AVMP
1988-032	1988 Apr 20 0548:12	1988-032A	Kosmos-1939	Resurs-O1 No. 2L	S19045 MOM	Vostok 8A92M	-	NIIP-5	LC31	NK9422-46
1988-033	1988 Apr 26 0157	1988-033A	NNS O-23	NNS O-23	S19070 USN	Scout G-1	S211C	V	SLC5	JCM
		1988-033B	NNS O-32	NNS O-32	S19071 USN					
1988-034	1988 Apr 26 0315:10	1988-034A	Kosmos-1940	Prognoz	S19073 MOM	Proton-K/DM-2	332-01	NIIP-5	LC200/39	NK9810-25
1988-035	1988 Apr 27 0910?	1988-035A	Kosmos-1941	Oblik	S19079 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-036	1988 May 6 0247:00	1988-036A	Ekran	Ekran No. 31L	S19090 MOM	Proton-K/DM	349-01	NIIP-5	LC200/39	NK9810-25
1988-037	1988 May 12 1440?	1988-037A	Kosmos-1942	Kobal't	S19115 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1988-037	Spuskaemiy Kapsula	SpK	A03672 MOM					
		1988-037C	Spuskaemiy Kapsula	SpK	S19273 MOM					
1988-038	1988 May 13 0030:25	1988-038A	Progress-36	Progress 7K-TG No. 144	S19117 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1988-039	1988 May 15 0920?	1988-039A	Kosmos-1943	Tselina-2	S19119 MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX
1988-040	1988 May 17 2358:00	1988-040A	Intelsat VA F13 (NSS 513)	Intelsat VA F13	S19121 Intelsat	Ariane 2	V23	CSG	ELA1	CNES32
1988-041	1988 May 18 1030?	1988-041A	Kosmos-1944	Kometa No. 9	S19123 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-042	1988 May 19 0915?	1988-042A	Kosmos-1945	Oblik	S19131 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-043	1988 May 21 1757:00	1988-043A	Kosmos-1946	Uragan No. 39L	S19163 MOM	Proton-K/DM-2	348-01	NIIP-5	LC200/39	NK9810-25
		1988-043B	Kosmos-1947	Uragan No. 40L	S19164 MOM					
		1988-043C	Kosmos-1948	Uragan No. 41L	S19165 MOM					
1988-044	1988 May 26 1527:00	1988-044A	Molniya-3	Molniya-3 No. 49	S19189 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1988-045	1988 May 28 0249?	1988-045A	Kosmos-1949	US-P	S19193 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1988-046	1988 May 30 0800:00	1988-046A	Kosmos-1950	Musson-Geo-1K	S19195 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	PL39
1988-047	1988 May 31 0745:00	1988-047A	Kosmos-1951	Resurs-F1 14F43 No. 28	S19197 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1988-048	1988 Jun 7 1403:13	1988-048A	Soyuz TM-5	Soyuz 7K-STM No. 55	S19204 MOM	Soyuz 11A511U2	-	NIIP-5	-	JCM
1988-049	1988 Jun 11 1000?	1988-049A	Kosmos-1952	Oblik	S19206 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-050	1988 Jun 14 0318?	1988-050A	Kosmos-1953	Tselina-D	S19210 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1988-051	1988 Jun 15 1119:01	1988-051A	Meteosat 3	Meteosat P2	S19215 Eumetsat	Ariane 44LP	V22	CSG	ELA2	CNES32
		1988-051C	PAS 1	PAS 1	S19217 Panamsat					
		1988-051B	Amsat-Oscar-13	Amsat Phase IIIC	S19216 AMSAT-DL					
1988-052	1988 Jun 16 0654	1988-052A	Nova 2	Nova 2	S19223 USN	Scout G-1	S213C	V	SLC5	JCM
1988-053	1988 Jun 21 1626?	1988-053A	Kosmos-1954	Strela-2	S19256 MO SSSR	Kosmos 11K65M	47126-191	NIIP-53	LC133/3	RAEX
1988-054	1988 Jun 22 1300?	1988-054A	Kosmos-1955	Kobal't	S19258 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1988-054	Spuskaemiy Kapsula	SpK	A03688 MOM					
		1988-054	Spuskaemiy Kapsula	SpK	A03702 MOM					
1988-055	1988 Jun 23 0745?	1988-055A	Kosmos-1956	Oblik	S19263 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-056	1988 Jul 5 0945:00	1988-056A	Okean	Okean-O1 3	S19274 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/1	NK9422-49
1988-057	1988 Jul 7 0805:00	1988-057A	Kosmos-1957	Resurs-F1 14F43 No. 29	S19276 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
1988-058	1988 Jul 7 1738:04	1988-058A	Fobos-1	1F No. 101	S19281 MOM	Proton-K/D-2	356-02	NIIP-5	LC200/39	NK9810-25
		1988-058	DPS	Dolgozhivushchaya PS	A03693 MOM					
1988-F02	1988 Jul 9	1988-F02	[Kosmos]	Terilen	F01015 MOM	Soyuz 11A511U	-	NIIP-5	-	AVMNLJ
1988-F03	1988 Jul 12	1988-F03	SROSS-B	SROSS-B	F01018 ISRO	ASLV	ASLV-D2	SHAR	SLV	Wire
1988-059	1988 Jul 12 1701:43	1988-059A	Fobos-2	1F No. 102	S19287 MOM	Proton-K/D-2	356-01	NIIP-5	LC200/40	NK9810-25
		1988-059	DPS	Dolgozhivushchaya PS	A03694 MOM					
		1988-059	PPS	Prigayushchaya PS	A03695 MOM					
1988-060	1988 Jul 14 1140?	1988-060A	Kosmos-1958	Vektor	S19320 MO SSSR	Kosmos 11K65M	47111-224	NIIP-53	LC132/1	RAEX
1988-061	1988 Jul 18 2113:09	1988-061A	Progress-37	Progress 7K-TG No. 145	S19322 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1988-062	1988 Jul 18 2228?	1988-062A	Kosmos-1959	Parus	S19324 MO SSSR	Kosmos 11K65M	65096-175	NIIP-53	LC133/3	RAEX
1988-063	1988 Jul 21 2312:00	1988-063A	Insat 1C	Insat 1C	S19330 ISRO	Ariane 1	V24	CSG	ELA1	CNES32
		1988-063B	Eutelsat I F-5	ECS 5	S19331 Eutelsat					
1988-064	1988 Jul 26 0501:00	1988-064A	Meteor-3	Meteor-3 No. 3	S19336 MO SSSR	Tsiklon-3	-	NIIP-53	-	NK9402-34
1988-F04	1988 Jul 27 0905:00	1988-F04	[Kosmos]	Resurs-F1 14F43 No. 30	F01020 MOM	Soyuz 11A511U	78039130	NIIP-53	LC43/4	NK95-20-29
1988-065	1988 Jul 28 1120?	1988-065A	Kosmos-1960	Romb	S19338 MO SSSR	Kosmos 11K65M	65026-187	NIIP-53	LC132/1	RAEX
		1988-065G	Kosmos-1960 SS 1	ESO	S19506 MO SSSR					
		1988-065H	Kosmos-1960 SS 2	ESO	S19507 MO SSSR					
		1988-065J	Kosmos-1960 SS 3	ESO	S19511 MO SSSR					
		1988-065K	Kosmos-1960 SS 4	ESO	S19512 MO SSSR					
		1988-065L	Kosmos-1960 SS 5	ESO	S19602 MO SSSR					
		1988-065M	Kosmos-1960 SS 6	ESO	S19603 MO SSSR					
		1988-065N	Kosmos-1960 SS 7	ESO	S20365 MO SSSR					
		1988-065P	Kosmos-1960 SS 8	ESO	S20366 MO SSSR					
		1988-065Q	Kosmos-1960 SS 9	ESO	S20375 MO SSSR					
		1988-065R	Kosmos-1960 SS 10	ESO	S20376 MO SSSR					
		1988-065S	Kosmos-1960 SS 11	ESO	S20377 MO SSSR					
		1988-065T	Kosmos-1960 SS 12	ESO	S20378 MO SSSR					
		1988-065U	Kosmos-1960 SS 13	ESO	S20379 MO SSSR					
		1988-065V	Kosmos-1960 SS 14	ESO	S20380 MO SSSR					
		1988-065W	Kosmos-1960 SS 15	ESO	S20381 MO SSSR					
		1988-065X	Kosmos-1960 SS 16	ESO	S20382 MO SSSR					
		1988-065Y	Kosmos-1960 SS 17	ESO	S20383 MO SSSR					
		1988-065Z	Kosmos-1960 SS 18	ESO	S20384 MO SSSR					
		1988-065AA	Kosmos-1960 SS 19	ESO	S20385 MO SSSR					
		1988-065AB	Kosmos-1960 SS 20	ESO	S20386 MO SSSR					
		1988-065AC	Kosmos-1960 SS 21	ESO	S20387 MO SSSR					
		1988-065AD	Kosmos-1960 SS 22	ESO	S20388 MO SSSR					
		1988-065AE	Kosmos-1960 SS 23	ESO	S20395 MO SSSR					
		1988-065AF	Kosmos-1960 SS 24	ESO	S20396 MO SSSR					
1988-066	1988 Aug 1 2104:00	1988-066A	Kosmos-1961	Geizer No. 16L	S19344 MOM	Proton-K/DM-2	351-01	NIIP-5	LC200/39	NK9422-47
1988-067	1988 Aug 5 0729	1988-067A	FSW-1	FSW-1	S19368 MAI	Chang Zheng 2C	CZ2C-11 (18)	JQ	LA2B	MTR-4
		1988-067	FSW RV	FSW RV	A03700 MAI					

1988-068	1988 Aug 8 0925?	1988-068A	Kosmos-1962	Oblik	S19372 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-069	1988 Aug 12 1253?	1988-069A	Molniya-1	Molniya-1	S19377 MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1988-070	1988 Aug 16 1300?	1988-070A	Kosmos-1963	Kobal't	S19384 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
		1988-070	Spuskaemiy Kapsula	SpK	A03704 MOM					
		1988-070	Spuskaemiy Kapsula	SpK	A03709 MOM					
1988-071	1988 Aug 18 1952:00	1988-071A	Gorizont	Gorizont No. 28L	S19397 MOM	Proton-K/DM-2	333-02	NIIP-5	LC200/40	NK9602-24
1988-072	1988 Aug 23 0920?	1988-072A	Kosmos-1964	Oblik	S19412 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-073	1988 Aug 23 1115:00	1988-073A	Kosmos-1965	Resurs-F2 17F42 No. 2	S19414 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1988-074	1988 Aug 25 0659	1988-074A	NNS O-25	NNS O-25	S19419 USN	Scout G-1	S214C	V	SLC5	JCM
		1988-074B	NNS O-31	NNS O-31	S19420 USN					
1988-075	1988 Aug 29 0423:11	1988-075A	Soyuz TM-6	Soyuz 7K-STM No. 56	S19443 MOM	Soyuz 11A511U2	-	NIIP-5	-	JCM
1988-076	1988 Aug 30 1414:54	1988-076A	Kosmos-1966	Oko	S19445 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1988-077	1988 Sep 2 1205	1988-077A	USA 31	VORTEX 5	S19458 USAF/NSA	Titan 34D/Transtage	34D-3 (05D-5)	CC	LC40	JCM
1988-078	1988 Sep 5 0925	1988-078A	USA 32	SBWASS R1	S19460 USAF	Titan II SLV	23G-1	V	SLC4W	JCM
1988-079	1988 Sep 6 0730?	1988-079A	Kosmos-1967	Oblik	S19462 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-080	1988 Sep 6 2030	1988-080A	Feng Yun-1	Feng Yun-1	S19467 MAI	Chang Zheng 4	CZ4-1 (19)	TYSC	LC1	PSC/C/89-1
1988-081	1988 Sep 8 2300:00	1988-081A	Gstar 3	Gstar 3	S19483 GTE	Ariane 3	V25	CSG	ELA2	CNES32
		1988-081B	SBS 5	SBS 5	S19484 IBM STLC					
1988-082	1988 Sep 9 1040:00	1988-082A	Kosmos-1968	Resurs-F1 14F43 No. 31	S19488 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1	NK95-20-29
1988-083	1988 Sep 9 2333:40	1988-083A	Progress-38	Progress 7K-TG No. 146	S19486 MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1988-084	1988 Sep 15 1500?	1988-084A	Kosmos-1969	Kobal't	S19495 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1988-084	Spuskaemiy Kapsula	SpK	A03729 MOM					
		1988-084	Spuskaemiy Kapsula	SpK	A03734 MOM					
1988-085	1988 Sep 16 0200:47	1988-085A	Kosmos-1970	Uragan No. 42L	S19501 MOM	Proton-K/DM-2	349-02	NIIP-5	LC200/39	NK9810-25
		1988-085B	Kosmos-1971	Uragan No. 43L	S19502 MOM					
		1988-085C	Kosmos-1972	Uragan No. 44L	S19503 MOM					
1988-086	1988 Sep 16 0959	1988-086A	Sakura 3B	CS-3B	S19508 NASDA/TCSJ	H-1	H-19(F)	TNSC	N	WWW-NASDA
1988-087	1988 Sep 19 0932?	1988-087A	'Ofeq-1	'Ofeq-1	S19519 ISA	Shaviyt	1	PALB		RAE
1988-088	1988 Sep 22 1020?	1988-088A	Kosmos-1973	Oblik	S19521 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-089	1988 Sep 24 1002:00	1988-089A	NOAA 11	NOAA H	S19531 NOAA	Atlas E	63E	V	SLC3W	POES-WWW
1988-090	1988 Sep 29 0907:00	1988-090A	Molniya-3	Molniya-3 No. 51	S19541 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1988-091	1988 Sep 29 1537:00	1988-091A	Discovery	OV-103	S19547 NASA JSC	Space Shuttle	STS-26R	MPL2, KSC	LC39B	STSJSC
		1988-091B	TDRS 3	TDRS C	S19548 NASA GSFC					
1988-092	1988 Oct 3 2223:39	1988-092A	Kosmos-1974	Oko	S19554 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1988-093	1988 Oct 11 0801?	1988-093A	Kosmos-1975	Tselina-D	S19573 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1988-094	1988 Oct 13 1119?	1988-094A	Kosmos-1976	Oblik	S19582 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-095	1988 Oct 20 1543:00	1988-095A	Raduga	Gran' No. 34L	S19596 MOM	Proton-K/DM-2	339-01	NIIP-5	LC200/39	NK9810-25
1988-096	1988 Oct 25 1802:31	1988-096A	Kosmos-1977	Oko	S19608 MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1988-097	1988 Oct 27 1131?	1988-097A	Kosmos-1978	Oblik	S19612 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-098	1988 Oct 28 0217:00	1988-098A	TDF 1	TDF 1	S19621 France Tel	Ariane 2	V26	CSG	ELA1	CNES32
1988-099	1988 Nov 6 1803	1988-099A	USA 33	KH11-9 KENNAN	S19625 NRO/CIA	Titan 34D	34D-14 (04D-7)	V	SLC4E	LR881107
1988-F05	1988 Nov 11	1988-F05	[Kosmos-1K]	Terilen	F01025 MOM	Soyuz 11A511U	-	NIIP-5	-	AVMNLJ
1988-100	1988 Nov 15 0300:02	1988-100A	Buran OK-1K	Buran OK-1K No. 711	S19637 MOM	Energiya/Buran	1L	NIIP-5	LC110L	Energiya
		1988-100A	BDP	37KB No. 1	A03738 MOM					
1988-101	1988 Nov 18 0012?	1988-101A	Kosmos-1979	US-P	S19647 MO SSSR	Tsiklon-2	-	NIIP-5	-	RAEX
1988-102	1988 Nov 23 1450?	1988-102A	Kosmos-1980	Tselina-2	S19649 MO RF	Zenit-2	-	NIIP-5	LC45/1	RAEX
1988-103	1988 Nov 24 1450?	1988-103A	Kosmos-1981	Oblik	S19651 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-104	1988 Nov 26 1549:34	1988-104A	Soyuz TM-7	Soyuz 7K-STM No. 57	S19660 MOM	Soyuz 11A511U2	-	NIIP-5	-	JCM
1988-105	1988 Nov 30 0900?	1988-105A	Kosmos-1982	Oblik	S19662 MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1988-106	1988 Dec 2 1430:34	1988-106A	Atlantis	OV-104	S19670 NASA JSC	Space Shuttle	STS-27R	MPL1, KSC	LC39B	STSJSC
		1988-106B	LACROSSE 1	LACROSSE 1	S19671 NRO/CIA					
1988-107	1988 Dec 8 1450?	1988-107A	Kosmos-1983	Oblik	S19672 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1988-108	1988 Dec 10 1154:00	1988-108A	Ekran-M	Ekran-M No. 12L	S19683 MOM	Proton-K/DM-2	329-02	NIIP-5	LC200/40	NK9810-25
1988-109	1988 Dec 11 0033:38	1988-109A	Skyнет 4B	Skyнет 4B	S19687 UK MoD	Ariane 44LP	V27	CSG	ELA2	CNES32
		1988-109B	Astra 1A	Astra 1A	S19688 SES					
1988-110	1988 Dec 16 1900?	1988-110A	Kosmos-1984	Kobal't	S19705 MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1988-110	Spuskaemiy Kapsula	SpK	A03741 MOM					
		1988-110	Spuskaemiy Kapsula	SpK	A03757 MOM					
1988-111	1988 Dec 22 1240	1988-111A	Zhongxing 2	DFH 2A-2	S19710 Chinasat	Chang Zheng 3	CZ3-5 (20)	XSC	LC1	PSC/C/89-1
1988-112	1988 Dec 22 1415:59	1988-112A	Molniya-3	Molniya-3 No. 52	S19713 MOM	Molniya 8K78M	-	NIIP-53	-	NK9815-26
1988-113	1988 Dec 23 0720?	1988-113A	Kosmos-1985	[Cal6]	S19720 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
		1988-113B	Kosmos-1985 SS 1	ESO	S19721 MO SSSR					
		1988-113C	Kosmos-1985 SS 2	ESO	S19726 MO SSSR					
		1988-113D	Kosmos-1985 SS 3	ESO	S19727 MO SSSR					
		1988-113E	Kosmos-1985 SS 4	ESO	S19711 MO SSSR					
		1988-113F	Kosmos-1985 SS 5	ESO	S19712 MO SSSR					
		1988-113G	Kosmos-1985 SS 6	ESO	S19763 MO SSSR					
		1988-113J	Kosmos-1985 SS 7	ESO	S19885 MO SSSR					
		1988-113K	Kosmos-1985 SS 8	ESO	S19886 MO SSSR					
		1988-113L	Kosmos-1985 SS 9	ESO	S19912 MO SSSR					
		1988-113M	Kosmos-1985 SS 10	ESO	S19943 MO SSSR					
		1988-113N	Kosmos-1985 SS 11	ESO	S19944 MO SSSR					
		1988-113P	Kosmos-1985 SS 12	ESO	S19958 MO SSSR					
		1988-113Q	Kosmos-1985 SS 13	ESO	S19959 MO SSSR					
		1988-113R	Kosmos-1985 SS 14	ESO	S20097 MO SSSR					
		1988-113S	Kosmos-1985 SS 15	ESO	S20098 MO SSSR					
		1988-113T	Kosmos-1985 SS 16	ESO	S20099 MO SSSR					
		1988-113U	Kosmos-1985 SS 17	ESO	S20181 MO SSSR					
		1988-113V	Kosmos-1985 SS 18	ESO	S20182 MO SSSR					
		1988-113W	Kosmos-1985 SS 19	ESO	S20183 MO SSSR					
		1988-113X	Kosmos-1985 SS 20	ESO	S20184 MO SSSR					
		1988-113Y	Kosmos-1985 SS 21	ESO	S20286 MO SSSR					

		1988-113Z	Kosmos-1985 SS 22	ESO	S20287	MO SSSR					
		1988-113AA	Kosmos-1985 SS 23	ESO	S20288	MO SSSR					
		1988-113AB	Kosmos-1985 SS 24	ESO	S20289	MO SSSR					
		1988-113AC	Kosmos-1985 SS 25	ESO	S20290	MO SSSR					
		1988-113AD	Kosmos-1985 SS 26	ESO	S20291	MO SSSR					
		1988-113AE	Kosmos-1985 SS 27	ESO	S20342	MO SSSR					
		1988-113AF	Kosmos-1985 SS 28	ESO	S20343	MO SSSR					
		1988-113AG	Kosmos-1985 SS 29	ESO	S20345	MO SSSR					
		1988-113AH	Kosmos-1985 SS 30	ESO	S20346	MO SSSR					
		1988-113AJ	Kosmos-1985 SS 31	ESO	S20422	MO SSSR					
		1988-113AK	Kosmos-1985 SS 32	ESO	S20423	MO SSSR					
		1988-113AL	Kosmos-1985 SS 33	ESO	S20424	MO SSSR					
		1988-113AM	Kosmos-1985 SS 34	ESO	S20425	MO SSSR					
		1988-113AN	Kosmos-1985 SS 35	ESO	S20430	MO SSSR					
		1988-113AP	Kosmos-1985 SS 36	ESO	S20431	MO SSSR					
1988-114	1988 Dec 25 0411:37	1988-114A	Progress-1985	Progress 7K-TG No. 147	S19728	MOM	Soyuz 11A511U2	-	NIIP-5	-	NK9807-46
1988-115	1988 Dec 28 0527?	1988-115A	Molniya-1	Molniya-1	S19730	MOM	Molniya 8K78M	-	NIIP-53	-	RAEX
1988-116	1988 Dec 29 1000?	1988-116A	Kosmos-1986	Komet No. 10	S19734	MOM	Soyuz 11A511U	-	NIIP-5	-	RAEX
1989-001	1989 Jan 10 0205:25	1989-001A	Kosmos-1987	Uragan No. 27L	S19749	MOM	Proton-K/DM-2	350-02	GIK-5	LC200/39	NK9810-25
		1989-001B	Kosmos-1988	Uragan No. 45L	S19750	MOM					
		1989-001C	Kosmos-1989	Etalon PKA No. 1L	S19751	MOM					
1989-002	1989 Jan 12 1129:59	1989-002A	Kosmos-1990	Resurs-F2 17F42 No. 3	S19756	MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
1989-003	1989 Jan 18 0820?	1989-003A	Kosmos-1991	Oblik	S19758	MOM	Soyuz 11A511U	-	GIK-5	-	RAEX
1989-004	1989 Jan 26 0916:00	1989-004A	Gorizont	Gorizont No. 29L	S19765	MOM	Proton-K/DM-2	351-02	GIK-5	LC200/40	NK9602-24
1989-005	1989 Jan 26 1536?	1989-005A	Kosmos-1992	Strela-2	S19769	MO SSSR	Kosmos 11K65M	65079-812	NIIP-53	LC132/2	RAEX
1989-006	1989 Jan 27 0121:00	1989-006A	Intelsat VA F15	Intelsat VA F15	S19772	Intelsat	Ariane 2	V28	CSG	ELA1	CNES32
1989-007	1989 Jan 28 1230?	1989-007A	Kosmos-1993	Kobal't	S19774	MOM	Soyuz 11A511U	-	GIK-5	-	RAEX
		1989-007	Spuskaemiy Kapsula	SpK	A03761	MOM					
		1989-007	Spuskaemiy Kapsula	SpK	A03773	MOM					
1989-008	1989 Feb 10 0853:52	1989-008A	Progress-40	Progress 7K-TG No. 148	S19783	MOM	Soyuz 11A511U2	-	GIK-5	-	NK9807-46
1989-009	1989 Feb 10 1513?	1989-009A	Kosmos-1994	Strela-3	S19785	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
		1989-009B	Kosmos-1995	Strela-3	S19786	MO SSSR					
		1989-009C	Kosmos-1996	Strela-3	S19787	MO SSSR					
		1989-009D	Kosmos-1997	Strela-3	S19788	MO SSSR					
		1989-009E	Kosmos-1998	Strela-3	S19789	MO SSSR					
		1989-009F	Kosmos-1999	Strela-3	S19790	MO SSSR					
1989-010	1989 Feb 10 1655?	1989-010A	Kosmos-2000	Oblik	S19792	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1989-011	1989 Feb 14 0421:11	1989-011A	Kosmos-2001	Oko	S19796	MOM	Molniya 8K78M	-	NIIP-53	-	NK9715-48
1989-012	1989 Feb 14 1700?	1989-012A	Kosmos-2002	[Cal7]	S19800	MO SSSR	Kosmos 11K65M	53726-192	NIIP-53	LC132/2	RAEX
		1989-012C	Kosmos-2002 SS 1	ESO	S19805	MO SSSR					
		1989-012D	Kosmos-2002 SS 2	ESO	S19806	MO SSSR					
		1989-012E	Kosmos-2002 SS 3	ESO	S19821	MO SSSR					
		1989-012F	Kosmos-2002 SS 4	ESO	S19825	MO SSSR					
		1989-012G	Kosmos-2002 SS 5	ESO	S19832	MO SSSR					
		1989-012H	Kosmos-2002 SS 6	ESO	S19846	MO SSSR					
		1989-012J	Kosmos-2002 SS 7	ESO	S19847	MO SSSR					
		1989-012K	Kosmos-2002 SS 8	ESO	S19848	MO SSSR					
		1989-012L	Kosmos-2002 SS 9	ESO	S19849	MO SSSR					
		1989-012M	Kosmos-2002 SS 10	ESO	S19850	MO SSSR					
1989-013	1989 Feb 14 1830	1989-013A	Navstar GPS 14	Navstar SVN 14	S19802	USAF	Delta 6925	D184	CC	LC17A	JCM
1989-014	1989 Feb 15 1100?	1989-014A	Molniya-1	Molniya-1	S19807	MOM	Molniya 8K78M	-	GIK-5	-	RAEX
1989-015	1989 Feb 17 1459?	1989-015A	Kosmos-2003	Oblik	S19818	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1989-016	1989 Feb 21 2330:00	1989-016A	Akebono	EXOS-D	S19822	ISAS	Mu-3S-II	M-3S2-4	KASC	M1	JCM
1989-017	1989 Feb 22 0328?	1989-017A	Kosmos-2004	Parus	S19826	MO SSSR	Kosmos 11K65M	47111-236	NIIP-53	LC132/2	RAEX
1989-018	1989 Feb 28 0405?	1989-018A	Meteor-2	Meteor-2	S19851	MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1989-019	1989 Mar 2 1859?	1989-019A	Kosmos-2005	Kobal't	S19862	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1989-019	Spuskaemiy Kapsula	SpK	A03775	MOM					
		1989-019	Spuskaemiy Kapsula	SpK	A03789	MOM					
1989-020	1989 Mar 6 2329:00	1989-020A	JCSAT 1	JCSAT 1	S19874	JCSAT	Ariane 44LP	V29	CSG	ELA2	CNES32
		1989-020B	Meteosat 4	MOP 1	S19876	Eumetsat					
1989-021	1989 Mar 13 1457:00	1989-021A	Discovery	OV-103	S19882	NASA JSC	Space Shuttle	STS-29R	MLP2, KSC	LC39B	STSJSC
		1989-021B	TDRS 4	TDRS D	S19883	NASA GSFC					
		1989-021	SHARE	SHARE	A03779	NASA JSC					
		1989-021	OASIS 1	OASIS 1	A03780	NASA JSC					
1989-022	1989 Mar 16 1459?	1989-022A	Kosmos-2006	Oblik	S19893	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1989-023	1989 Mar 16 1854:15	1989-023A	Progress-41	Progress 7K-TG No. 149	S19895	MOM	Soyuz 11A511U2	-	GIK-5	-	NK9807-46
1989-024	1989 Mar 23 1225?	1989-024A	Kosmos-2007	Terilen	S19900	MOM	Soyuz 11A511U	-	GIK-5	-	RAEX
1989-025	1989 Mar 24 1338?	1989-025A	Kosmos-2008	Strela-1M	S19902	MO SSSR	Kosmos 11K65M	65011-232	NIIP-53	LC132/2	RAEX
		1989-025B	Kosmos-2009	Strela-1M	S19903	MO SSSR					
		1989-025C	Kosmos-2010	Strela-1M	S19904	MO SSSR					
		1989-025D	Kosmos-2011	Strela-1M	S19905	MO SSSR					
		1989-025E	Kosmos-2012	Strela-1M	S19906	MO SSSR					
		1989-025F	Kosmos-2013	Strela-1M	S19907	MO SSSR					
		1989-025G	Kosmos-2014	Strela-1M	S19908	MO SSSR					
		1989-025H	Kosmos-2015	Strela-1M	S19909	MO SSSR					
1989-026	1989 Mar 24 2150	1989-026A	Delta Star	Delta Star	S19911	SDIO	Delta 3920-8	D183	CC	LC17B	JCM
1989-027	1989 Apr 2 0228:00	1989-027A	Tele-X	Tele-X	S19919	NSAB	Ariane 2	V30	CSG	ELA1	CNES32
1989-028	1989 Apr 4 1836?	1989-028A	Kosmos-2016	Parus	S19921	MO SSSR	Kosmos 11K65M	47126-194	NIIP-53	LC132/2	RAEX
1989-029	1989 Apr 6 1400?	1989-029A	Kosmos-2017	Oblik	S19923	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
1989-030	1989 Apr 14 0408:00	1989-030A	Raduga	Gran' No. 33L	S19928	MOM	Proton-K/DM-2	359-02	GIK-5	LC200/39	NK9810-25
1989-031	1989 Apr 20 1829?	1989-031A	Kosmos-2018	Kobal't	S19938	MOM	Soyuz 11A511U	-	NIIP-53	-	RAEX
		1989-031	Spuskaemiy Kapsula	SpK	A03795	MOM					



1989-032	1989 Apr 26 1700:00	1989-031	Spuskaemiy Kapsula	SpK	A03803 MOM							
1989-033	1989 May 4 1847:00	1989-032A	Foton	Foton No. 5L	S19941 MOM	Soyuz 11A511U	-	NIIP-53	LC41/1		AVMP	
		1989-033A	Atlantis	OV-104	S19968 NASA JSC	Space Shuttle	STS-30R	MLP1, KSC	LC39B		STJSJC	
		1989-033B	Magellan	Magellan	S19969 NASA/JPL							
1989-034	1989 May 5 1300?	1989-034A	Kosmos-2019	Oblik	S19972 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1989-035	1989 May 10 1947	1989-035A	USA 37	VORTEX 6	S19976 USAF/NSA	Titan 34D/Transtage	34D-16 (05D-6)	CC	LC40		JCM	
1989-036	1989 May 17 1300?	1989-036A	Kosmos-2020	Kobal't	S19986 MOM	Soyuz 11A511U	-	GIK-5	-		RAEX	
		1989-036	Spuskaemiy Kapsula	SpK	A03805 MOM							
		1989-036	Spuskaemiy Kapsula	SpK	A03811 MOM							
1989-037	1989 May 24 1030?	1989-037A	Kosmos-2021	Kometa No. 11	S20000 MOM	Soyuz 11A511U	-	GIK-5	-		RAEX	
1989-038	1989 May 25 0850:00	1989-038A	Resurs-F	Resurs-F1 14F43 No. 45	S20006 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3		NK95-20-29	
		1989-038C	Pion	Pion-1	S20056 MOM							
		1989-038D	Pion	Pion-2	S20060 MOM							
1989-039	1989 May 31 0831:59	1989-039A	Kosmos-2022	Uragan No. 28L	S20024 MOM	Proton-K/DM-2	352-02	GIK-5	LC200/40		NK9810-25	
		1989-039B	Kosmos-2023	Uragan No. 29L	S20025 MOM							
		1989-039C	Kosmos-2024	Etalon PKA No. 2L	S20026 MOM							
1989-040	1989 Jun 1 1259?	1989-040A	Kosmos-2025	Oblik	S20035 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1989-041	1989 Jun 5 2237:18	1989-041A	Superbird A	Superbird A	S20040 SCC	Ariane 44L	V31	CSG	ELA2		CNES32	
		1989-041B	Kopernikus	DFS 1	S20041 Bundespost							
1989-042	1989 Jun 7 0512?	1989-042A	Kosmos-2026	Parus	S20045 MO SSSR	Kosmos 11K65M	53711-225	NIIP-53	LC132/2		RAEX	
1989-043	1989 Jun 8 1709:59	1989-043A	Molniya-3	Molniya-3 No. 45	S20052 MOM	Molniya 8K78M	-	NIIP-53	-		NK9815-26	
1989-F01	1989 Jun 9 1010:00	1989-F01	Okean	Okean-01 4	F01028 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2		NK9422-49	
1989-044	1989 Jun 10 2230	1989-044A	Navstar GPS 13	Navstar SVN 13	S20061 USAF	Delta 6925	D185	CC	LC17A		JCM	
1989-045	1989 Jun 14 1230?	1989-045A	Kosmos-2027	Vektor	S20064 MO SSSR	Kosmos 11K65M	53761-249	NIIP-53	LC133/3		RAEX	
1989-046	1989 Jun 14 1318	1989-046A	DSP F14	DSP 14	S20066 USAF	Titan 402A/IUS	K-1 (45D-1)	CC	LC41		JCM	
1989-047	1989 Jun 16 0930?	1989-047A	Kosmos-2028	Oblik	S20073 MOM	Soyuz 11A511U	-	GIK-5	-		RAEX	
1989-048	1989 Jun 21 2335:00	1989-048A	Raduga-1	Globus No. 11	S20083 MOM	Proton-K/DM-2	355-02	GIK-5	LC200/39		NK9810-25	
1989-049	1989 Jun 27 0804:59	1989-049A	Resurs-F	Resurs-F1 14F43 No. 46	S20095 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2		NK95-20-29	
1989-050	1989 Jul 4 1521:36	1989-050A	Nadezhda	Tsikada-Kospas	S20103 MO SSSR	Kosmos 11K65M	65061-250	NIIP-53	LC133/3		PL38	
1989-051	1989 Jul 5 0800?	1989-051A	Kosmos-2029	Oblik	S20105 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1989-052	1989 Jul 5 2245:00	1989-052A	Gorizont	Gorizont No. 27L	S20107 MOM	Proton-K/DM-2	340-02	GIK-5	LC200/40		NK9602-24	
1989-053	1989 Jul 12 0014:00	1989-053A	Olympus	Olympus	S20122 ESA	Ariane 3	V32	CSG	ELA1		CNES32	
1989-054	1989 Jul 12 1500?	1989-054A	Kosmos-2030	Kobal't	S20124 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
		1989-054	Spuskaemiy Kapsula	SpK	A03818 MOM							
		1989-054	Spuskaemiy Kapsula	SpK	A03820 MOM							
1989-055	1989 Jul 18 0944:59	1989-055A	Resurs-F	Resurs-F1 14F43 No. 47	S20134 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2		NK95-20-29	
		1989-055C	Pion	Pion-3	S20160 MOM							
		1989-055D	Pion	Pion-4	S20161 MOM							
1989-056	1989 Jul 18 1210?	1989-056A	Kosmos-2031	Don	S20136 MOM	Soyuz 11A511U2	-	GIK-5	LC1		RAEX	
		1989-056	Spuskaemiy Kapsula	SpK	A03812 MOM							
		1989-056	Spuskaemiy Kapsula	SpK	A03830 MOM							
		1989-056	Spuskaemiy Kapsula	SpK	A03822 MOM							
		1989-056	Spuskaemiy Kapsula	SpK	A03823 MOM							
		1989-056	Spuskaemiy Kapsula	SpK	A03824 MOM							
		1989-056	Spuskaemiy Kapsula	SpK	A03825 MOM							
		1989-056	Spuskaemiy Kapsula	SpK	A03826 MOM							
1989-057	1989 Jul 20 0859?	1989-057A	Kosmos-2032	Oblik	S20145 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1989-058	1989 Jul 24 0000?	1989-058A	Kosmos-2033	US-P	S20147 MO SSSR	Tsiklon-2	-	GIK-5	-		RAEX	
1989-059	1989 Jul 25 0748?	1989-059A	Kosmos-2034	Parus	S20149 MO SSSR	Kosmos 11K65M	65061-256	NIIP-53	LC133/3		RAEX	
1989-060	1989 Aug 2 1129?	1989-060A	Kosmos-2035	Oblik	S20151 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1989-061	1989 Aug 8 1237:00	1989-061A	Columbia	OV-102	S20164 NASA JSC	Space Shuttle	STS-28R	MLP2, KSC	LC39B		STJSJC	
		1989-061B	USA 40	SDS B-1	S20167 USAF							
		1989-061C	USA-41	USA-41	S20172 DARPA?							
1989-062	1989 Aug 8 2325:53	1989-062A	TV-SAT 2	TV-SAT 2	S20168 Bundespost	Ariane 44LP	V33	CSG	ELA2		CNES32	
		1989-062B	Hipparcos	Hipparcos	S20169 ESA							
1989-063	1989 Aug 15 1029:59	1989-063A	Resurs-F	Resurs-F2 17F42 No. 4	S20175 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4		NK95-20-29	
1989-064	1989 Aug 18 0558	1989-064A	Navstar GPS 16	Navstar SVN 16	S20185 USAF	Delta 6925	D186	CC	LC17A		AWST890828-21	
1989-065	1989 Aug 22 1259?	1989-065A	Kosmos-2036	Oblik	S20188 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1989-066	1989 Aug 23 0309:32	1989-066A	Progress M	Progress 7K-TGM No. 201	S20191 MOM	Soyuz 11A511U2	T15000-037	GIK-5	LC1		NK9807-46	
1989-067	1989 Aug 27 2259	1989-067A	Marcopolo 1 (Sirius 1)	BSB R1	S20193 BSB	Delta 4925-8	D187	CC	LC17B		AWST890904-24	
1989-068	1989 Aug 28 0014:00	1989-068A	Kosmos-2037	Musson-Geo-IK	S20196 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2		PL39	
1989-069	1989 Sep 4 0554	1989-069A	DSCS II F-15	DSCS II F-15	S20202 USAF	Titan 34D/Transtage	34D-2 (05D-7)	CC	LC40		AWST890911-41	
		1989-069B	DSCS III A-2	DSCS III A-2	S20203 USAF							
1989-070	1989 Sep 5 1911	1989-070A	Himawari 4	GMS 4	S20217 NASDA	H-1	H-20(F)	TNSC	N		WWW-NASDA	
1989-071	1989 Sep 5 2138:03	1989-071A	Soyuz TM-8	Soyuz 7K-STM No. 58	S20218 MOM	Soyuz 11A511U2	-	GIK-5	-		VSA	
1989-072	1989 Sep 6 0249	1989-072A	USA 45	SBWASS R2	S20220 USAF	Titan II SLV	23G-2	V	SLC4W		JCM	
1989-073	1989 Sep 6 1049:59	1989-073A	Resurs-F	Resurs-F1 14F43 No. 48	S20222 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3		NK95-20-29	
1989-074	1989 Sep 14 0949?	1989-074A	Kosmos-2038	Strela-3	S20232 MO SSSR	Tsiklon-3	-	NIIP-53	-		RAEX	
		1989-074B	Kosmos-2039	Strela-3	S20233 MO SSSR							
		1989-074C	Kosmos-2040	Strela-3	S20234 MO SSSR							
		1989-074D	Kosmos-2041	Strela-3	S20235 MO SSSR							
		1989-074E	Kosmos-2042	Strela-3	S20236 MO SSSR							
		1989-074F	Kosmos-2043	Strela-3	S20237 MO SSSR							
1989-075	1989 Sep 15 0630:00	1989-075A	Kosmos-2044	Bion No. 9	S20242 MOM	Soyuz 11A511U	-	NIIP-53	-		NK96-26-34	
1989-076	1989 Sep 22 0800?	1989-076A	Kosmos-2045	Oblik	S20244 MOM	Soyuz 11A511U	-	GIK-5	-		RAEX	
1989-077	1989 Sep 25 0841	1989-077A	FLTSATCOM F8	FLTSATCOM F8	S20253 USN	Atlas G Centaur	AC-68	CC	LC36B		AWST891002-23	
1989-078	1989 Sep 27 1438?	1989-078A	Molniya-1	Molniya-1	S20255 MOM	Molniya 8K78M	-	NIIP-53	-		RAEX	
1989-079	1989 Sep 27 1620?	1989-079A	Kosmos-2046	US-P	S20259 MO SSSR	Tsiklon-2	-	GIK-5	-		RAEX	
1989-080	1989 Sep 28 0004:59	1989-080A	Interkosmos-24	AUOS-Z No. 201 (Aktivniy-S2-AK Magion-2	S20261 MOM	Tsiklon-3	-	NIIP-53	-		NK9521-43	
		1989-080B	Magion-2	S2-AK Magion-2	S20281 CSSR							
1989-081	1989 Sep 28 1705:00	1989-081A	Gorizont	Gorizont No. 31L	S20263 MOM	Proton-K/DM-2	346-01	GIK-5	LC200/40		NK9602-24	
1989-082	1989 Oct 3 1459?	1989-082A	Kosmos-2047	Kobal't	S20279 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	

			1989-082	Spuskaemiy Kapsula	SpK	A03851	MOM							
			1989-082	Spuskaemiy Kapsula	SpK	A03862	MOM							
1989-083	1989 Oct 17	1300?	1989-083A	Kosmos-2048	Oblik	S20292	MOM	Soyuz 11A511U	-	NIIP-53	-	LC39B	RAEX	
1989-084	1989 Oct 18	1653:40	1989-084A	Atlantis	OV-104	S20297	NASA JSC	Space Shuttle	STS-34R	MLP1, KSC			STJSJC	
			1989-084B	Galileo	Galileo	S20298	NASA/JPL							
			1989-084	Galileo Probe	Galileo Probe	A03854	NASA ARC							
			1989-084	SSBUV-1	SSBUV-1	A03855	-							
			1989-084	SSBUV-2	SSBUV-2	A03856	-							
1989-085	1989 Oct 21	0931	1989-085A	Navstar GPS 19	Navstar SVN 19	S20302	USAF	Delta 6925	D188	CC	LC17A		AWST891030-21	
1989-086	1989 Oct 24	2135:00	1989-086A	Meteor-3	Meteor-3 No. 4	S20305	MO SSSR	Tsiklon-3	-	NIIP-53	-		NK9402-34	
1989-087	1989 Oct 27	2305:00	1989-087A	Intelsat 602	Intelsat VI F-2	S20315	Intelsat	Ariane 44L	V34	CSG	ELA2		CNES32	
1989-088	1989 Nov 17	1050?	1989-088A	Kosmos-2049	Terilen	S20320	MOM	Soyuz 11A511U	-	GIK-5	-		RAEX	
1989-089	1989 Nov 18	1434	1989-089A	COBE	COBE	S20322	NASA GSFC	Delta 5920-8	D189	V	SLC2W		AWST891127-30	
1989-090	1989 Nov 23	0023:30	1989-090A	Discovery	OV-103	S20329	NASA JSC	Space Shuttle	STS-33R	MLP2, KSC	LC39B		STJSJC	
			1989-090B	USA 48	Magnum 2	S20355	USAF/NSA							
1989-091	1989 Nov 23	2035:44	1989-091A	Kosmos-2050	Oko	S20330	MOM	Molniya 8K78M	-	NIIP-53	-		NK9715-48	
1989-092	1989 Nov 24	2322?	1989-092A	Kosmos-2051	US-P	S20334	MO SSSR	Tsiklon-2	-	GIK-5	-		RAEX	
1989-093	1989 Nov 26	1301:41	1989-093A	Kvant-2	TSM-D	S20335	MOM	Proton-K	354-01	GIK-5	LC200/39		NK9810-25	
1989-094	1989 Nov 28	1002:00	1989-094A	Molniya-3	Molniya-3 No. 46	S20338	MOM	Molniya 8K78M	-	NIIP-53	-		NK9815-26	
1989-095	1989 Nov 30	1500?	1989-095A	Kosmos-2052	Kobal't	S20350	MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
			1989-095	Spuskaemiy Kapsula	SpK	A03870	MOM							
			1989-095	Spuskaemiy Kapsula	SpK	A03876	MOM							
1989-096	1989 Dec 1	2020:57	1989-096A	Granat	1AS No. 1	S20352	MOM	Proton-K/D-1	352-01	GIK-5	LC200/40		NK9810-25	
1989-097	1989 Dec 11	1810	1989-097A	Navstar GPS 17	Navstar SVN 17	S20361	USAF	Delta 6925	D190	CC	LC17B		JCM	
1989-098	1989 Dec 15	1130:00	1989-098A	Raduga	Gran' No. 36L	S20367	MOM	Proton-K/DM-2	344-01	GIK-5	LC81/23		NK9810-25	
1989-099	1989 Dec 20	0330:50	1989-099A	Progress M-2	Progress 7K-TGM No. 202	S20373	MOM	Soyuz 11A511U2	T15000-039?	GIK-5	LC1		NK9807-46	
1989-100	1989 Dec 27	0000:00	1989-100A	Kosmos-2053	[Cal6]	S20389	MO SSSR	Tsiklon-3	-	NIIP-53	-		NK9718-57	
			1989-100C	Kosmos-2053 SS 1	ESO	S20397	MO SSSR							
			1989-100D	Kosmos-2053 SS 2	ESO	S20398	MO SSSR							
			1989-100E	Kosmos-2053 SS 3	ESO	S20408	MO SSSR							
			1989-100F	Kosmos-2053 SS 4	ESO	S20467	MO SSSR							
			1989-100G	Kosmos-2053 SS 5	ESO	S20468	MO SSSR							
			1989-100H	Kosmos-2053 SS 6	ESO	S20515	MO SSSR							
			1989-100J	Kosmos-2053 SS 7	ESO	S20522	MO SSSR							
			1989-100K	Kosmos-2053 SS 8	ESO	S20531	MO SSSR							
			1989-100L	Kosmos-2053 SS 9	ESO	S20532	MO SSSR							
			1989-100M	Kosmos-2053 SS 10	ESO	S20637	MO SSSR							
			1989-100N	Kosmos-2053 SS 11	ESO	S20640	MO SSSR							
			1989-100P	Kosmos-2053 SS 12	ESO	S20802	MO SSSR							
			1989-100Q	Kosmos-2053 SS 13	ESO	S20803	MO SSSR							
			1989-100R	Kosmos-2053 SS 14	ESO	S20821	MO SSSR							
			1989-100S	Kosmos-2053 SS 15	ESO	S20822	MO SSSR							
			1989-100T	Kosmos-2053 SS 16	ESO	S20823	MO SSSR							
			1989-100U	Kosmos-2053 SS 17	ESO	S20911	MO SSSR							
			1989-100V	Kosmos-2053 SS 18	ESO	S21020	MO SSSR							
			1989-100X	Kosmos-2053 SS 19	ESO	S21022	MO SSSR							
			1989-100Y	Kosmos-2053 SS 20	ESO	S21023	MO SSSR							
			1989-100Z	Kosmos-2053 SS 21	ESO	S21042	MO SSSR							
			1989-100AA	Kosmos-2053 SS 22	ESO	S21043	MO SSSR							
			1989-100AB	Kosmos-2053 SS 23	ESO	S21064	MO SSSR							
			1989-100AC	Kosmos-2053 SS 24	ESO	S21205	MO SSSR							
			1989-100AD	Kosmos-2053 SS 25	ESO	S21206	MO SSSR							
			1989-100AE	Kosmos-2053 SS 26	ESO	S21207	MO SSSR							
			1989-100AF	Kosmos-2053 SS 27	ESO	S21537	MO SSSR							
			1989-100AG	Kosmos-2053 SS 28	ESO	S21540	MO SSSR							
			1989-100AH	Kosmos-2053 SS 29	ESO	S21767	MO SSSR							
			1989-100AJ	Kosmos-2053 SS 30	ESO	S21768	MO SSSR							
			1989-100AK	Kosmos-2053 SS 31	ESO	S21769	MO SSSR							
			1989-100AL	Kosmos-2053 SS 32	ESO	S21770	MO SSSR							
			1989-100AM	Kosmos-2053 SS 33	ESO	S21771	MO SSSR							
			1989-100AN	Kosmos-2053 SS 34	ESO	S21772	MO SSSR							
			1989-100AP	Kosmos-2053 SS 35	ESO	S21773	MO SSSR							
			1989-100AQ	Kosmos-2053 SS 36	ESO	S21774	MO SSSR							
1989-101	1989 Dec 27	1110:00	1989-101A	Kosmos-2054	Al'tair No. 14L	S20391	MOM	Proton-K/DM-2	347-02	GIK-5	LC200/39		NK9810-25	
1990-001	1990 Jan 1	0007	1990-001A	Skyнет 4A	Skyнет 4A	S20401	UK MoD	Commercial Titan 3	CT-1	CC	LC40		Wire	
			1990-001B	JCSAT 2	JCSAT 2	S20402	JCSAT							
1990-002	1990 Jan 9	1235:00	1990-002A	Columbia	OV-102	S20409	NASA JSC	Space Shuttle	STS-32R	MLP3, KSC	LC39A		STJSJC	
			1990-002B	Leasat 5	Syncom IV-5	S20410	HCI							
1990-003	1990 Jan 17	1445?	1990-003A	Kosmos-2055	Oblik	S20426	MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1990-004	1990 Jan 18	1252?	1990-004A	Kosmos-2056	Strela-2	S20432	MO SSSR	Kosmos 11K65M	65061-247	NIIP-53	LC133/3		RAEX	
1990-005	1990 Jan 22	0135:27	1990-005A	SPOT 2	SPOT 2	S20436	CNES	Ariane 40	V35	CSG	ELA2		CNES32	
			1990-005B	Webersat	Webersat	S20437	Weber CAST							
			1990-005C	Lusat	Lusat	S20438	AMSAT-LU							
			1990-005D	Dove	Dove	S20439	AMSAT-BR							
			1990-005E	Pacsat	Pacsat	S20440	AMSAT-NA							
			1990-005F	Uosat 3	Uosat 3	S20441	SSTL							
			1990-005G	Uosat 4	Uosat 4	S20442	SSTL							
1990-006	1990 Jan 23	0251:59	1990-006A	Molniya-3	Molniya-3 No. 53	S20444	MOM	Molniya 8K78M	-	NIIP-53	-		NK9815-26	
1990-007	1990 Jan 24	1146	1990-007A	Hiten	MUSES-A	S20448	ISAS	Mu-3S-II	M-3S2-5	KASC	M1		JCM	
			1990-007B	Hagoromo	MUSES-A Subsatellite	S20618	ISAS							
1990-008	1990 Jan 24	2255	1990-008A	Navstar GPS 18	Navstar SVN 18	S20452	USAF	Delta 6925	D191	CC	LC17A		Wire	
1990-009	1990 Jan 25	1715?	1990-009A	Kosmos-2057	Kobal't	S20457	MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	



			1990-009	Spuskaemiy Kapsula	SpK	A03893 MOM							
			1990-009	Spuskaemiy Kapsula	SpK	A03898 MOM							
1990-010	1990 Jan 30	1120?	1990-010A	Kosmos-2058	Tselina-D	S20465 MO SSSR	Tsiklon-3	-	NIIP-53	-		RAEX	
1990-011	1990 Feb 4	1228?	1990-011A	Zhongxing 3	DFH 2A	S20473 Chinastat	Chang Zheng 3	CZ3-6 (21)	XSC	LC1		RAE	
1990-012	1990 Feb 6	1630?	1990-012A	Kosmos-2059	[Cal17]	S20476 MO SSSR	Kosmos 11K65M	53711-237	NIIP-53	LC132/2		RAEX	
			1990-012C	Kosmos-2059 SS 1	ESO	S20481 MO SSSR							
			1990-012D	Kosmos-2059 SS 2	ESO	S20482 MO SSSR							
			1990-012E	Kosmos-2059 SS 3	ESO	S20483 MO SSSR							
			1990-012F	Kosmos-2059 SS 4	ESO	S20484 MO SSSR							
			1990-012G	Kosmos-2059 SS 5	ESO	S20485 MO SSSR							
			1990-012H	Kosmos-2059 SS 6	ESO	S20486 MO SSSR							
			1990-012J	Kosmos-2059 SS 7	ESO	S20487 MO SSSR							
			1990-012K	Kosmos-2059 SS 8	ESO	S20490 MO SSSR							
			1990-012L	Kosmos-2059 SS 9	ESO	S20492 MO SSSR							
			1990-012M	Kosmos-2059 SS 10	ESO	S20493 MO SSSR							
1990-013	1990 Feb 7	0133	1990-013A	Momo-1B	Momo-1b	S20478 NASDA	H-1	H-21 (F)	TNSC	N		WWW-NASDA	
			1990-013C	Fuji-2	JAS-1b	S20480 JARL							
			1990-013B	Orizuru	DEBUT	S20479 NASDA							
1990-014	1990 Feb 11	0616:00	1990-014A	Soyuz TM-9	Soyuz 7K-STM No. 60	S20494 MOM	Soyuz 11A511U2	-	GIK-5	-		VSA	
1990-015	1990 Feb 14	1615	1990-015A	LACE	LACE	S20496 SDIO	Delta 6920-8	D192	CC	LC17B		Wire	
			1990-015B	RME	RME	S20497 SDIO							
1990-016	1990 Feb 15	0752:00	1990-016A	Raduga	Gran' No. 35L	S20499 MOM	Proton-K/DM-2	363-02	GIK-5	LC81/23		NK9810-25	
1990-F01	1990 Feb 22	2317:00	1990-F01	Superbird B	Superbird B	F01040 SCC	Ariane 44L	V36	CSG	ELA2		CNES32	
			1990-F01	BS 2X	BS 2X	F01042 NHK							
1990-017	1990 Feb 27	2059:42	1990-017A	Nadezhda	Tsikada-Kospas	S20508 MO SSSR	Kosmos 11K65M	53711-228	NIIP-53	LC132/2		PL38	
1990-018	1990 Feb 28	0055:00	1990-018A	Okean-01	Okean-01 No. 5	S20510 MO SSSR	Tsiklon-3	-	NIIP-53	LC32/2		NK9422-49	
1990-019	1990 Feb 28	0750:22	1990-019A	Atlantis	OV-104	S20512 NASA JSC	Space Shuttle	STS-36R	MLP1, KSC	LC39A		STSJSC	
			1990-019B	APP-731	AFP-731	S20516 NRO							
1990-020	1990 Feb 28	2310:57	1990-020A	Progress M-3	Progress 7K-TGM No. 203	S20513 MOM	Soyuz 11A511U2	T15000-040	GIK-5	LC1		NK9807-46	
1990-021	1990 Mar 14	1152	1990-021A	Intelsat VI F-3	Intelsat VI F-3	S20523 INTELSAT	Commercial Titan 3	CT-2	CC	LC40		Wire	
1990-022	1990 Mar 14	1527?	1990-022A	Kosmos-2060	US-P	S20525 MO SSSR	Tsiklon-2	-	GIK-5	-		RAEX	
1990-023	1990 Mar 20	0025?	1990-023A	Kosmos-2061	Parus	S20527 MO SSSR	Kosmos 11K65M	47161-245	NIIP-53	LC133/3		RAEX	
1990-024	1990 Mar 22	0720?	1990-024A	Kosmos-2062	Oblik	S20529 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1990-025	1990 Mar 26	0245	1990-025A	Navstar GPS 20	Navstar SVN 20	S20533 USAF	Delta 6925	D193	CC	LC17A		Wire	
1990-026	1990 Mar 27	1640:08	1990-026A	Kosmos-2063	Oko	S20536 MOM	Molniya 8K78M	-	NIIP-53	-		NK9715-48	
1990-027	1990 Apr 3	1202	1990-027A	'ofeq-2	'ofeq-2	S20540 ISA	Shaviyt	2	PALB	-		JCM	
1990-F02	1990 Apr 3		1990-F02	[Kosmos]	Kobal't	F01046 MOM	Soyuz 11A511U	-	NIIP-53	-		AVMNLJ	
			1990-F02	Spuskaemiy Kapsula	SpK	F01031 MOM							
			1990-F02	Spuskaemiy Kapsula	SpK	F01033 MOM							
1990-028	1990 Apr 5	1910:17	1990-028A	Pegsat	Pegsat	S20546 NASA GSFC	Pegasus	001/F1			NB-52 008, EAFB	R Wire	
			1990-028B	TERCEL	SECS	S20547 DARPA/USN							
1990-029	1990 Apr 6	0313?	1990-029A	Kosmos-2064	Strela-1M	S20549 MO SSSR	Kosmos 11K65M	65061-259	NIIP-53	LC133/3		RAEX	
			1990-029B	Kosmos-2065	Strela-1M	S20550 MO SSSR							
			1990-029C	Kosmos-2066	Strela-1M	S20551 MO SSSR							
			1990-029D	Kosmos-2067	Strela-1M	S20552 MO SSSR							
			1990-029E	Kosmos-2068	Strela-1M	S20553 MO SSSR							
			1990-029F	Kosmos-2069	Strela-1M	S20554 MO SSSR							
			1990-029G	Kosmos-2070	Strela-1M	S20555 MO SSSR							
			1990-029H	Kosmos-2071	Strela-1M	S20556 MO SSSR							
1990-030	1990 Apr 7	1230	1990-030A	Asiasat 1	Asiasat 1	S20558 Asiasat	Chang Zheng 3	CZ3-7 (22)	XSC	LC1		JCM	
1990-031	1990 Apr 11	1600	1990-031A	POGS	POGS	S20560 USAF	Atlas E Altair	28E	V	SLC3W		Wire	
			1990-031B	TEX	TEX	S20561 USAF							
			1990-031C	SCE	SCE	S20562 USAF							
			1990-031D	PDD	Payload Deployment Device	A03910 USAF							
1990-032	1990 Apr 11	1700:00	1990-032A	Foton	Foton No. 6L	S20566 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3		AVMP	
1990-033	1990 Apr 13	1853?	1990-033A	Kosmos-2072	Terilen	S20568 MOM	Soyuz 11A511U	-	GIK-5	-		RAEX	
1990-034	1990 Apr 13	2228	1990-034A	Palapa B2R	Palapa B2R	S20570 Perumtel	Delta 6925-8	D194	CC	LC17B		Wire	
1990-035	1990 Apr 17	0800?	1990-035A	Kosmos-2073	Oblik	S20573 MOM	Soyuz 11A511U	-	NIIP-53	-		RAEX	
1990-036	1990 Apr 20	1841?	1990-036A	Kosmos-2074	Parus	S20577 MO SSSR	Kosmos 11K65M	53726-195	NIIP-53	LC133/3?		RAEX	
1990-037	1990 Apr 24	1233:52	1990-037A	Discovery	OV-103	S20579 NASA JSC	Space Shuttle	STS-31R	MLP2, KSC	LC39B		STSJSC	
			1990-037B	Hubble Space Telescope	Hubble Space Telescope	S20580 NASA GSFC							
1990-038	1990 Apr 25	1300?	1990-038A	Kosmos-2075	Romb	S20581 MO SSSR	Kosmos 11K65M	65061-253	NIIP-53	LC132/2		RAEX	
			1990-038D	Kosmos-2075 SS 1	ESO	S20746 MO SSSR							
			1990-038E	Kosmos-2075 SS 2	ESO	S20747 MO SSSR							
			1990-038F	Kosmos-2075 SS 3	ESO	S20748 MO SSSR							
			1990-038G	Kosmos-2075 SS 4	ESO	S20749 MO SSSR							
			1990-038H	Kosmos-2075 SS 5	ESO	S20750 MO SSSR							
			1990-038J	Kosmos-2075 SS 6	ESO	S20751 MO SSSR							
			1990-038K	Kosmos-2075 SS 7	ESO	S21864 MO SSSR							
			1990-038L	Kosmos-2075 SS 8	ESO	S21865 MO SSSR							
			1990-038M	Kosmos-2075 SS 9	ESO	S21866 MO SSSR							
			1990-038N	Kosmos-2075 SS 10	ESO	S21869 MO SSSR							
			1990-038P	Kosmos-2075 SS 11	ESO	S21870 MO SSSR							
			1990-038Q	Kosmos-2075 SS 12	ESO	S21871 MO SSSR							
			1990-038R	Kosmos-2075 SS 13	ESO	S21872 MO SSSR							
			1990-038	Kosmos-2075 SS 14	ESO	A03918 MO SSSR							
			1990-038	Kosmos-2075 SS 15	ESO	A03919 MO SSSR							
			1990-038	Kosmos-2075 SS 16	ESO	A03920 MO SSSR							
			1990-038	Kosmos-2075 SS 17	ESO	A03921 MO SSSR							
			1990-038	Kosmos-2075 SS 18	ESO	A03922 MO SSSR							
			1990-038	Kosmos-2075 SS 19	ESO	A03923 MO SSSR							
			1990-038	Kosmos-2075 SS 20	ESO	A03924 MO SSSR							

		1990-038	Kosmos-2075 SS 21	ESO	A03925	MO SSSR							
		1990-038	Kosmos-2075 SS 22	ESO	A03926	MO SSSR							
		1990-038	Kosmos-2075 SS 23	ESO	A03927	MO SSSR							
		1990-038	Kosmos-2075 SS 24	ESO	A03928	MO SSSR							
1990-039	1990 Apr 26	0137?	1990-039A	Molniya-1	S20583	MOM	Molniya 8K78M	-		NIIP-53	-		RAEX
1990-040	1990 Apr 28	1137:02	1990-040A	Kosmos-2076	S20596	MOM	Molniya 8K78M	-		NIIP-53	-		NK9715-48
1990-041	1990 May 5	2044:01	1990-041A	Progress-42	S20602	MOM	Soyuz 11A511U2	T15000-041		GIK-5	LC1		NK9807-46
1990-042	1990 May 7	1839?	1990-042A	Kosmos-2077	S20604	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX
			1990-042	Spuskaemiy Kapsula	SpK	A03935	MOM						
			1990-042	Spuskaemiy Kapsula	SpK	A03940	MOM						
1990-043	1990 May 9	1750	1990-043A	MACSAT 1	S20607	DARPA	Scout G-1	S212C		V	SLC5		JCM
			1990-043B	MACSAT 2	S20608	DARPA							
1990-044	1990 May 15	0955?	1990-044A	Kosmos-2078	S20615	MOM	Soyuz 11A511U	-		GIK-5	-		RAEX
1990-045	1990 May 19	0832:33	1990-045A	Kosmos-2079	S20619	MOM	Proton-K/DM-2	350-01		GIK-5	LC200/40		NK9810-25
			1990-045B	Kosmos-2080	S20620	MOM							
			1990-045C	Kosmos-2081	S20621	MOM							
1990-046	1990 May 22	0514?	1990-046A	Kosmos-2082	S20624	MO RF	Zenit-2	-		GIK-5	LC45/2		RAEX
1990-047	1990 May 29	0719:59	1990-047A	Resurs-F	S20632	MOM	Soyuz 11A511U	-		NIIP-53	LC43/4		NK95-20-29
1990-048	1990 May 31	1033:20	1990-048A	Kristall	S20635	MOM	Proton-K	360-01		GIK-5	LC200/39		NK9810-25
1990-049	1990 Jun 1	2148	1990-049A	ROSAT	S20638	DLR	Delta 6920-10	D195		CC	LC17A		Wire
1990-050	1990 Jun 8	0522	1990-050A	USA 59	S20641	NRO/NRL	Titan 405A	K-4	(45H-4)	CC	LC41		Wire
			1990-050B	USA 60	S20682	NRO/NRL							
			1990-050C	USA 61	S20691	NRO/NRL							
			1990-050D	USA 62	S20692	NRO/NRL							
			1990-050	TLD	A05011	NRO/NRL							
1990-051	1990 Jun 12	0552	1990-051A	Insat 1D	S20643	ISRO	Delta 4925-8	D196		CC	LC17B		Wire
1990-052	1990 Jun 13	0107:00	1990-052A	Molniya-3	S20646	MOM	Molniya 8K78M	-		NIIP-53	-		NK9815-26
1990-053	1990 Jun 19	0845?	1990-053A	Kosmos-2083	S20657	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX
1990-054	1990 Jun 20	2336:00	1990-054A	Gorizont	S20659	MOM	Proton-K/DM	342-02		GIK-5	LC200/40		NK9602-24
1990-055	1990 Jun 21	2045:52	1990-055A	Kosmos-2084	S20663	MOM	Molniya 8K78M	-		NIIP-53	LC43/3		NK9701-29
1990-056	1990 Jun 23	1119	1990-056A	Intelsat 604	S20667	INTELSAT	Commercial Titan 3	CT-3		CC	LC40		Wire
1990-057	1990 Jun 27	2230?	1990-057A	Meteor-2	S20670	MOM	Tsiklon-3	-		NIIP-53	-		RAEX
1990-F03	1990 Jul 3		1990-F03	[Kosmos]	F01048	MOM	Soyuz 11A511U	-		NIIP-53	-		AVMNLJ
			1990-F03	Spuskaemiy Kapsula	SpK	F01036	MOM						
			1990-F03	Spuskaemiy Kapsula	SpK	F01038	MOM						
1990-058	1990 Jul 11	1000?	1990-058A	Gamma	S20683	MOM	Soyuz 11A511U2	-		GIK-5	LC1		RAEX
1990-059	1990 Jul 16	0040	1990-059	HS-601 Model	A03948	MAI	Chang Zheng 2E	CZ2E-1	(23)	XSC	LC2		JCM
			1990-059A	BADR	S20685	Suparco							
1990-060	1990 Jul 17	0929:59	1990-060A	Resurs-F	S20687	MOM	Soyuz 11A511U	-		NIIP-53	LC43/3		NK95-20-29
1990-061	1990 Jul 18	2146:00	1990-061A	Kosmos-2085	S20693	MOM	Proton-K/DM-2	340-01		GIK-5	LC200/39		NK9422-47
1990-062	1990 Jul 20	0840?	1990-062A	Kosmos-2086	S20702	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX
1990-064	1990 Jul 24	1813:56	1990-064A	Kosmos-2087	S20707	MOM	Molniya 8K78M	-		NIIP-53	-		NK9715-48
1990-063	1990 Jul 24	2225:00	1990-063A	TDF 2	S20705	France Tel	Ariane 44L	V37		CSG	ELA2		CNES32
			1990-063B	Kopernikus 2	S20706	Bundespost							
1990-065	1990 Jul 25	1921	1990-065A	CRRES	S20712	USAF/NASA	Atlas I	AC-69		CC	LC36B		Wire
1990-066	1990 Jul 30	0006:00	1990-066A	Kosmos-2088	S20720	MO SSSR	Tsiklon-3	-		NIIP-53	LC32/1		PL39
1990-067	1990 Aug 1	0932:21	1990-067A	Soyuz TM-10	S20722	MOM	Soyuz 11A511U2	-		GIK-5	-		VSA
1990-068	1990 Aug 2	0539	1990-068A	Navstar GPS 21	S20724	USAF	Delta 6925	D197		CC	LC17A		Wire
1990-069	1990 Aug 3	1945?	1990-069A	Kosmos-2089	S20732	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX
			1990-069	Spuskaemiy Kapsula	SpK	A03950	MOM						
			1990-069	Spuskaemiy Kapsula	SpK	A03965	MOM						
1990-070	1990 Aug 8	0415?	1990-070A	Kosmos-2090	S20735	MO SSSR	Tsiklon-3	-		NIIP-53	-		RAEX
			1990-070B	Kosmos-2091	S20736	MO SSSR							
			1990-070C	Kosmos-2092	S20737	MO SSSR							
			1990-070D	Kosmos-2093	S20738	MO SSSR							
			1990-070E	Kosmos-2094	S20739	MO SSSR							
			1990-070F	Kosmos-2095	S20740	MO SSSR							
1990-F04	1990 Aug 9	2018:59	1990-F04	Ekran-M	F01054	MOM	Proton-K/DM-2	345-02		GIK-5	LC200/39		NK9810-25
1990-071	1990 Aug 10	2018?	1990-071A	Molniya-1T	S20742	MOM	Molniya 8K78M	-		NIIP-53	-		RAEX
1990-072	1990 Aug 15	0400:41	1990-072A	Progress M-4	S20752	MOM	Soyuz 11A511U2	T15000-042		GIK-5	LC1		NK9807-46
1990-073	1990 Aug 16	0954:59	1990-073A	Resurs-F	S20754	MOM	Soyuz 11A511U	-		NIIP-53	LC43/4		NK95-20-29
1990-074	1990 Aug 18	0042	1990-074A	Marcopolo 2 (Thor 1)	S20762	BSB	Delta 6925	D198		CC	LC17B		Wire
1990-075	1990 Aug 23	1617?	1990-075A	Kosmos-2096	S20765	MO SSSR	Tsiklon-2	-		GIK-5	-		RAEX
1990-076	1990 Aug 28	0749:13	1990-076A	Kosmos-2097	S20767	MOM	Molniya 8K78M	-		NIIP-53	-		NK9715-48
1990-077	1990 Aug 28	0905	1990-077A	Yuri 3A	S20771	NASDA/TCSJ	H-1	H-22(F)		TNSC	N		WW-NASDA
1990-078	1990 Aug 28	1545?	1990-078A	Kosmos-2098	S20774	MO SSSR	Kosmos 11K65M	53711-240		NIIP-53	LC133/3		RAEX
1990-079	1990 Aug 30	2246:00	1990-079B	Eutelsat IIF1	S20777	Eutelsat	Ariane 44LP	V38		CSG	ELA2		CNES32
			1990-079A	Skyнет 4C	S20776	UK MoD							
1990-080	1990 Aug 31	0800?	1990-080A	Kosmos-2099	S20779	MOM	Soyuz 11A511U	-		NIIP-53	-		RAEX
1990-081	1990 Sep 3	0053	1990-081A	Feng Yun	S20788	MAI	Chang Zheng 4	CZ4-2	(24)	TYSC	LC1		JCM
			1990-081B	QQW 1	S20789	MAI							
			1990-081C	QQW 2	S20790	MAI							
1990-082	1990 Sep 7	1159:59	1990-082A	Resurs-F	S20794	MOM	Soyuz 11A511U	-		NIIP-53	LC16/2		NK95-20-29
1990-083	1990 Sep 14	0559?	1990-083A	Kosmos-2100	S20804	MO SSSR	Kosmos 11K65M	65048-403		NIIP-53	LC133/3		RAEX
1990-084	1990 Sep 20	2016:59	1990-084A	Molniya-3	S20813	MOM	Molniya 8K78M	-		NIIP-53	-		NK9815-26
1990-085	1990 Sep 27	1037:42	1990-085A	Progress M-5	S20824	MOM	Soyuz 11A511U2	T15000-044		GIK-5	LC1		NK9807-46
			1990-085	VBK Raduga	A03989	MOM							
1990-086	1990 Sep 28	0730?	1990-086A	Meteor-2	S20826	MO SSSR	Tsiklon-3	-		NIIP-53	-		RAEX
1990-087	1990 Oct 1	1100?	1990-087A	Kosmos-2101	S20828	MOM	Soyuz 11A511U2	-		GIK-5	LC1		RAEX
			1990-087	Spuskaemiy Kapsula	SpK	A03877	MOM						
			1990-087	Spuskaemiy Kapsula	SpK	A03878	MOM						
			1990-087	Spuskaemiy Kapsula	SpK	A03879	MOM						



1991-003	1991 Jan 15 2310:49	1991-003A 1991-003B	Italsat 1 Eutelsat II F-2	Italsat 1 Eutelsat II F-2	S21055 ASI S21056 Eutelsat	Ariane 44L	V41	CSG	ELA2	CNES32
1991-004	1991 Jan 17 1030?	1991-004A	Kosmos-2121	Oblik	S21059 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	RAEX
1991-005	1991 Jan 18 1134?	1991-005A	Kosmos-2122	US-P	S21065 MO SSSR	Tsiklon-2	-	GIK-5	-	RAEX
1991-006	1991 Jan 29 1159:58	1991-006A	Informator-1 (AO-21)	Informator No. 1	S21087 MO SSSR	Kosmos 11K65M	53744-158	NIIP-53	LC133/3	JCM
1991-007	1991 Feb 5 0236?	1991-007A	Kosmos-2123	Tsikada/RS-12/RS-13	S21089 MO SSSR	Kosmos 11K65M	47148-407	NIIP-53	LC133/3	RAEX
1991-008	1991 Feb 7 1815?	1991-008A 1991-008 1991-008	Kosmos-2124 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK SpK	S21092 MOM A04021 MOM A04024 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	RAEX
1991-009	1991 Feb 12 0244?	1991-009A 1991-009B 1991-009C 1991-009D 1991-009E 1991-009F 1991-009G 1991-009H	Kosmos-2125 Kosmos-2126 Kosmos-2127 Kosmos-2128 Kosmos-2129 Kosmos-2130 Kosmos-2131 Kosmos-2132	Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M Strela-1M	S21100 MO SSSR S21101 MO SSSR S21102 MO SSSR S21103 MO SSSR S21104 MO SSSR S21105 MO SSSR S21106 MO SSSR S21107 MO SSSR	Kosmos 11K65M	47187-204	NIIP-53	LC133/3	RAEX
1991-010	1991 Feb 14 0831:56	1991-010A	Kosmos-2133	Prognoz	S21111 MOM	Proton-K/DM-2	344-02	GIK-5	LC200/39	NK9810-25
1991-011	1991 Feb 15 0930?	1991-011A	Kosmos-2134	Kometa No. 13	S21116 MOM	Soyuz 11A511U	-	GIK-5	LC1/LC31?	RAEX
1991-012	1991 Feb 15 1519?	1991-012A	Molniya-1	Molniya-1T	S21118 MOM	Molniya 8K78M	-	NIIP-53	LC43/3	RAEX
1991-013	1991 Feb 26 0453:06	1991-013A	Kosmos-2135	Parus	S21130 MO SSSR	Kosmos 11K65M	47168-254	NIIP-53	LC133/3	NK9910-36
1991-014	1991 Feb 28 0530:00	1991-014A	Raduga	Gran' No. 38L	S21132 MOM	Proton-K/DM-2	360-02	GIK-5	LC81/23	NK9810-25
1991-015	1991 Mar 2 2336:00	1991-015A 1991-015B	Astra 1B Meteosat 5	Astra 1B MOP 2	S21139 SES S21140 ESA	Ariane 44LP	V42	CSG	ELA2	CNES32
1991-016	1991 Mar 6 1530?	1991-016A	Kosmos-2136	Oblik	S21143 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	RAEX
1991-017	1991 Mar 8 1203	1991-017A	USA 69	LACROSSE 2	S21147 NRO/CIA	Titan 403A	K-5 (45F-1)	V	SLC4E	Wire
1991-018	1991 Mar 8 2303	1991-018A	Inmarsat II F-2	Inmarsat II F-2	S21149 Inmarsat	Delta 6925	D203	CC	LC17B	Wire
1991-019	1991 Mar 12 1929:04	1991-019A	Nadezhda	Tsikada-Kospas	S21152 MO SSSR	Kosmos 11K65M	65048-406	NIIP-53	LC133/3	PL38
1991-020	1991 Mar 19 1305:15	1991-020A 1991-020	Progress M-7 VBK Raduga	Progress 7K-TGM No. 208 VBK	S21188 MOM A04052 MOM	Soyuz 11A511U2	R15000-049	GIK-5	LC1	NK9807-46
1991-021	1991 Mar 19 1430?	1991-021A	Kosmos-2137	Yug	S21190 MO SSSR	Kosmos 11K65M	53448-417	NIIP-53	LC132/1	RAEX
1991-022	1991 Mar 22 1219:59	1991-022A	Molniya-3	Molniya-3 No. 55	S21196 MOM	Molniya 8K78M	-	NIIP-53	LC43/4	NK9815-26
1991-023	1991 Mar 26 1345?	1991-023A 1991-023 1991-023	Kosmos-2138 Spuskaemiy Kapsula Spuskaemiy Kapsula	Kobal't SpK SpK	S21203 MOM A04030 MOM A04051 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	RAEX
1991-024	1991 Mar 31 1512:00	1991-024A	Almaz-1	Mech-KU No. 305	S21213 MOM	Proton-K	365-01	GIK-5	LC200/40	NK9810-25
1991-025	1991 Apr 4 1047:12	1991-025A 1991-025B 1991-025C	Kosmos-2139 Kosmos-2140 Kosmos-2141	Uragan No. 50L Uragan No. 53L Uragan No. 54L	S21216 MOM S21217 MOM S21218 MOM	Proton-K/DM-2	354-02	GIK-5	LC200/39	NK9810-25
1991-026	1991 Apr 4 2333:00	1991-026A	Anik E2	Anik E2	S21222 Telesat	Ariane 44P	V43	CSG	ELA2	CNES32
1991-027	1991 Apr 5 1422:45	1991-027A 1991-027B	Atlantis Compton Observatory	OV-104 Gamma Ray Observatory	S21224 NASA JSC S21225 NASA GSFC	Space Shuttle	STS-37R	MLP1, KSC	LC39B	STSJSC
1991-028	1991 Apr 13 0009	1991-028A	Spacenet 4	ASC 2	S21227 Contel	Delta 7925	D204	CC	LC17B	Wire
1991-029	1991 Apr 16 0721:42	1991-029A	Kosmos-2142	Parus	S21230 MO SSSR	Kosmos 11K65M	47148-401	NIIP-53	LC132/1	NK9910-34
1991-F01	1991 Apr 18 2330	1991-F01	BS-3H	BS-3H	F01062 NHK	Atlas I	AC-70	CC	LC36B	SN910422-1
1991-030	1991 Apr 24 0137:00	1991-030A	Meteor-3	Meteor-3 No. 6	S21232 MO SSSR	Tsiklon-3	-	NIIP-53	-	NK9402-34
1991-031	1991 Apr 28 1133:14	1991-031A 1991-031 1991-031 1991-031B 1991-031F 1991-031E 1991-031D 1991-031C	Discovery AFP-675 STP-1 IBSS/SPAS CRO-A CRO-B CRO-C USA 70	OV-103 AFP-675 STP-1 SPAS-2 CRO-A CRO-B CRO-C MPEC	S21242 NASA JSC A04044 USAF STP A04045 USAF STP S21244 SDIO S21247 SDIO S21246 SDIO S21245 SDIO S21262 DARPA?	Space Shuttle	STS-39	MLP2, KSC	LC39A	STSJSC
1991-032	1991 May 14 1552	1991-032A	NOAA 12	NOAA D	S21263 NOAA	Atlas E	50E	V	SLC3W	Wire
1991-033	1991 May 16 2140?	1991-033A 1991-033B 1991-033C 1991-033D 1991-033E 1991-033F	Kosmos-2143 Kosmos-2144 Kosmos-2145 Kosmos-2146 Kosmos-2147 Kosmos-2148	Strela-3 Strela-3 Strela-3 Strela-3 Strela-3 Strela-3	S21299 MO SSSR S21300 MO SSSR S21301 MO SSSR S21302 MO SSSR S21303 MO SSSR S21304 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1991-034	1991 May 18 1250:28	1991-034A	Soyuz TM-12	Soyuz 7K-STM No. 62	S21311 MOM	Soyuz 11A511U2	-	GIK-5	LC1	VSA034
1991-035	1991 May 21 0900:00	1991-035A	Resurs-F	Resurs-F2 17F42 No. 6	S21313 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK95-20-29
1991-036	1991 May 24 1529?	1991-036A 1991-036 1991-036 1991-037A 1991-038A 1986-017FJ	Kosmos-2149 Spuskaemiy Kapsula Spuskaemiy Kapsula Aurora 2 Progress M-8	Kobal't SpK SpK Satcom C-5 Progress 7K-TGM No. 207	S21315 MOM A04061 MOM A04063 MOM S21392 GE Alascom S21395 MOM	Soyuz 11A511U2	R15000-050	GIK-5	LC1	NK9807-46
1991-037	1991 May 29 2255	1991-037A	Aurora 2	Satcom C-5	S21392 GE Alascom	Delta 7925	D205	CC	LC17B	Wire
1991-038	1991 May 30 0804:03	1991-038A	Progress M-8	Progress 7K-TGM No. 207	S21395 MOM	Soyuz 11A511U2	R15000-050	GIK-5	LC1	NK9807-46
1991-039	1991 Jun 4 0810:00	1991-039A	Naduvaniy gazovoy ballon	Balloon subsatellite	S21661 MOM	Tsiklon-3	-	NIIP-53	LC32/2	NK9422-49
1991-040	1991 Jun 5 1324:51	1991-040A 1991-040 1991-040	Okean Columbia Spacelab SLS 1 GBA-2	Okean-O1 6 OV-102 Spacelab Long Module GAS Bridge	S21397 MOM S21399 NASA JSC A04067 NASA MSFC A04068 NASA MSFC	Space Shuttle	STS-40	MLP3, KSC	LC39B	STSJSC
1991-041	1991 Jun 11 0541?	1991-041A	Kosmos-2150	Strela-2	S21418 MO SSSR	Kosmos 11K65M	47159-819	NIIP-53	LC133/3	RAEX
1991-042	1991 Jun 13 1541?	1991-042A	Kosmos-2151	Tselina-D	S21422 MO SSSR	Tsiklon-3	-	NIIP-53	-	RAEX
1991-043	1991 Jun 18 0909?	1991-043A	Molniya-1	Molniya-1T	S21426 MOM	Molniya 8K78M	-	NIIP-53	LC43/4	RAEX
1991-F02	1991 Jun 25	1991-F02 1991-F02 1991-F02 1991-F02 1991-F02 1991-F02	Kosmos Kosmos Kosmos Kosmos Kosmos Kosmos	Romb ESO ESO ESO ESO ESO	F01065 MO SSSR F01066 MO SSSR F01067 MO SSSR F01068 MO SSSR F01069 MO SSSR F01070 MO SSSR	Kosmos 11K65M	65061-262	NIIP-53	LC132/1	AVMNLJ

			1991-F02	Kosmos	SS 6	ESO	F01071	MO SSSR										
			1991-F02	Kosmos	SS 7	ESO	F01072	MO SSSR										
			1991-F02	Kosmos	SS 8	ESO	F01073	MO SSSR										
			1991-F02	Kosmos	SS 9	ESO	F01074	MO SSSR										
			1991-F02	Kosmos	SS 10	ESO	F01075	MO SSSR										
			1991-F02	Kosmos	SS 11	ESO	F01076	MO SSSR										
			1991-F02	Kosmos	SS 12	ESO	F01077	MO SSSR										
			1991-F02	Kosmos	SS 13	ESO	F01078	MO SSSR										
			1991-F02	Kosmos	SS 14	ESO	F01079	MO SSSR										
			1991-F02	Kosmos	SS 15	ESO	F01080	MO SSSR										
			1991-F02	Kosmos	SS 16	ESO	F01081	MO SSSR										
			1991-F02	Kosmos	SS 17	ESO	F01082	MO SSSR										
			1991-F02	Kosmos	SS 18	ESO	F01083	MO SSSR										
			1991-F02	Kosmos	SS 19	ESO	F01084	MO SSSR										
			1991-F02	Kosmos	SS 20	ESO	F01085	MO SSSR										
			1991-F02	Kosmos	SS 21	ESO	F01086	MO SSSR										
			1991-F02	Kosmos	SS 22	ESO	F01087	MO SSSR										
			1991-F02	Kosmos	SS 23	ESO	F01088	MO SSSR										
			1991-F02	Kosmos	SS 24	ESO	F01089	MO SSSR										
1991-044	1991 Jun 28 0809:59		1991-044A	Resurs-F		Resurs-F1 14F43 No. 52	S21524	MOM	Soyuz 11A511U	-		NIIP-53	LC43/3				NK95-20-29	
1991-045	1991 Jun 29 1400		1991-045A	REX		REX	S21527	USAF Rome	Scout G-1	S216C		V	SLC5				NASA-PR91-102	
1991-046	1991 Jul 1 2153:00		1991-046A	Gorizont		Gorizont No. 34L	S21533	MOM	Proton-K/DM-2	373-01		GIK-5	LC200/39				NK9602-24	
1991-047	1991 Jul 4 0232		1991-047B	LOSAT-X		LOSAT-X	S21553	SDIO	Delta 7925	D206		CC	LC17A				AWST910715-24	
			1991-047A	Navstar GPS 24		Navstar SVN 24	S21552	USAF										
1991-048	1991 Jul 9 0940?		1991-048A	Kosmos-2152		Kosmos-2152	S21558	MOM	Soyuz 11A511U	-		NIIP-53	LC43/4				RAEX	
1991-049	1991 Jul 10 1400?		1991-049A	Kosmos-2153		Neman	S21560	MOM	Soyuz 11A511U	-		GIK-5	LC31				RAEX	
1991-050	1991 Jul 17 0146:31		1991-050A	ERS-1		ERS-1	S21574	ESA	Ariane 40	V44		CSG	ELA2				CNES32	
			1991-050B	Tubsat		Tubsat	S21575	TUB										
			1991-050C	SARA		SARA	S21576	ESIEESPACE										
			1991-050D	Orbcomm-X		Orbcomm-X	S21577	Orbcomm										
			1991-050E	Uosat 5		Uosat 5	S21578	SSTL										
1991-051	1991 Jul 17 1733:53		1991-051A	Microsat 1		Microsat 1	S21580	DARPA	Pegasus/HAPS	002/F2		NB-52 008,EAFB					R AWST910722-24	
			1991-051B	Microsat 2		Microsat 2	S21581	DARPA										
			1991-051C	Microsat 3		Microsat 3	S21582	DARPA										
			1991-051D	Microsat 4		Microsat 4	S21583	DARPA										
			1991-051E	Microsat 5		Microsat 5	S21584	DARPA										
			1991-051F	Microsat 6		Microsat 6	S21585	DARPA										
			1991-051G	Microsat 7		Microsat 7	S21586	DARPA										
1991-052	1991 Jul 23 0905:00		1991-052A	Resurs-F		Resurs-F1 14F43 No. 53	S21611	MOM	Soyuz 11A511U	-		NIIP-53	LC43/3				NK95-20-29	
1991-053	1991 Aug 1 1153?		1991-053A	Molniya-1		Molniya-1T	S21630	MOM	Molniya 8K78M	-		NIIP-53	LC43/4				RAEX	
1991-054	1991 Aug 2 1502:00		1991-054A	Atlantis		OV-104	S21638	NASA JSC	Space Shuttle	STS-43		MPL1, KSC	LC39A				STSJSC	
			1991-054B	TDRS 5		TDRS-E	S21639	NASA GSFC										
1991-055	1991 Aug 14 2315:13		1991-055A	Intelsat 605		Intelsat VI F-5	S21653	Intelsat	Ariane 44L	V45		CSG	ELA2				CNES32	
1991-056	1991 Aug 15 0914:59		1991-056A	Meteor-3		Meteor-3 No. 5/TOMS	S21655	GMS	Tsiklon-3	-		NIIP-53	-				NK91-2-4	
1991-057	1991 Aug 20 2254:10		1991-057A	Progress M-9		Progress 7K-TGM No. 210	S21662	MOM	Soyuz 11A511U2	G15000-047		GIK-5	LC1				NK9807-46	
			1991-057	VBK Raduga		VBK	A04096	MOM										
1991-058	1991 Aug 21 1050:00		1991-058A	Resurs-F		Resurs-F2 17F42 No. 7	S21664	MOM	Soyuz 11A511U	-		NIIP-53	LC43/3				NK95-20-29	
1991-059	1991 Aug 22 1235:46		1991-059A	Kosmos-2154		Parus	S21666	MO SSSR	Kosmos 11K65M	53778-429		NIIP-53	LC132/1?				NK9910-34	
1991-060	1991 Aug 25 0840		1991-060A	Yuri 1B		BS 3B	S21668	NASDA/TCSJ	H-1	H-23(F)		TNSC	N				WWW-NASDA	
1991-061	1991 Aug 29 0648:43		1991-061A	IRS-1B		IRS-1B	S21688	ISRO	Vostok 8A92M	-		GIK-5	LC31				NK91-3-3	
1991-062	1991 Aug 30 0230		1991-062A	Yohkoh		SOLAR-A	S21694	ISAS	Mu-3S-II	M-3S2-6		KASC	M1				JCM	
1991-F03	1991 Aug 30 0858:01		1991-F03	-		Tselina-2	F01095	MO RF	Zenit-2	-		GIK-5	LC45/1				NK91-3	
1991-063	1991 Sep 12 2311:04		1991-063A	Discovery		OV-103	S21700	NASA JSC	Space Shuttle	STS-48		MPL3, KSC	LC39A				STSJSC	
			1991-063B	UARS		UARS	S21701	NASA GSFC										
1991-064	1991 Sep 13 1751:02		1991-064A	Kosmos-2155		Prognoz	S21702	MOM	Proton-K/DM-2	353-01		GIK-5	LC81/23				NK9810-25	
1991-065	1991 Sep 17 2001:59		1991-065A	Molniya-3		Molniya-3 No. 48	S21706	MOM	Molniya 8K78M	-		NIIP-53	LC43/4				NK9815-26	
1991-066	1991 Sep 19 1620?		1991-066A	Kosmos-2156		Kobal't	S21713	MOM	Soyuz 11A511U	-		NIIP-53	LC43/3				RAEX	
			1991-066	Spuskaemiy Kapsula		SpK	A04098	MOM										
			1991-066	Spuskaemiy Kapsula		SpK	A04105	MOM										
1991-067	1991 Sep 26 2343:00		1991-067A	Anik El		Anik El	S21726	Telesat	Ariane 44P	V46		CSG	ELA2				CNES32	
1991-068	1991 Sep 28 0705?		1991-068A	Kosmos-2157		Strela-3	S21728	MO SSSR	Tsiklon-3	-		NIIP-53	-				RAEX	
			1991-068B	Kosmos-2158		Strela-3	S21729	MO SSSR										
			1991-068C	Kosmos-2159		Strela-3	S21730	MO SSSR										
			1991-068D	Kosmos-2160		Strela-3	S21731	MO SSSR										
			1991-068E	Kosmos-2161		Strela-3	S21732	MO SSSR										
			1991-068F	Kosmos-2162		Strela-3	S21733	MO SSSR										
1991-069	1991 Oct 2 0559:39		1991-069A	Soyuz TM-13		Soyuz 7K-STM No. 63	S21735	MOM	Soyuz 11A511U2	-		GIK-5	LC1				VSA030	
1991-070	1991 Oct 4 1810:00		1991-070A	Foton		Foton No. 7L	S21737	MOM	Soyuz 11A511U	-		NIIP-53	LC43/4				AVMP	
1991-071	1991 Oct 9 1315?		1991-071A	Kosmos-2163		Don	S21741	MOM	Soyuz 11A511U2	-		GIK-5	LC1				RAEX	
			1991-071	Spuskaemiy Kapsula		SpK	A04007	MOM										
			1991-071	Spuskaemiy Kapsula		SpK	A04008	MOM										
			1991-071	Spuskaemiy Kapsula		SpK	A04009	MOM										
			1991-071	Spuskaemiy Kapsula		SpK	A04010	MOM										
			1991-071	Spuskaemiy Kapsula		SpK	A04011	MOM										
			1991-071	Spuskaemiy Kapsula		SpK	A04012	MOM										
			1991-071	Spuskaemiy Kapsula		SpK	A04013	MOM										
1991-072	1991 Oct 10 1400?		1991-072A	Kosmos-2164		Yug	S21743	MO SSSR	Kosmos 11K65M	53778-420		NIIP-53	LC132/1				RAEX	
1991-073	1991 Oct 17 0005:25		1991-073A	Progress M-10		Progress 7K-TGM No. 211	S21746	MOM	Soyuz 11A511U2	15000-055		GIK-5	LC1				NK9807-46	
			1991-073	VBK Raduga		VBK	A04123	MOM										
1991-074	1991 Oct 23 1525:00		1991-074A	Gorizont		Gorizont No. 35L	S21759	MOM	Proton-K/DM-2	362-02		GIK-5	LC200/39				NK9602-24	
1991-075	1991 Oct 29 2308:08		1991-075A	Intelsat 601		Intelsat VI F-1	S21765	Intelsat	Ariane 44L	V47		CSG	ELA2				CNES32	
1991-076	1991 Nov 8 0707		1991-076A	USA 72		NOSS B-2	S21775	NRO/NRL	Titan 403A	K-8 (45F-2)		V	SLC4E				AWST911118-20	

			1991-076C	USA 74	SSU	S21799 NRO/NRL							
			1991-076D	USA 76	SSU	S21808 NRO/NRL							
			1991-076E	USA 77	SSU	S21809 NRO/NRL							
			1991-076	TLD	TLD	A05012 NRO/NRL							
1991-077	1991 Nov 12	2009?	1991-077A	Kosmos-2165	Strela-3	S21779 MO SSSR	Tsiklon-3	-	NIIP-53	-		RAEX	
			1991-077B	Kosmos-2166	Strela-3	S21780 MO SSSR							
			1991-077C	Kosmos-2167	Strela-3	S21781 MO SSSR							
			1991-077D	Kosmos-2168	Strela-3	S21782 MO SSSR							
			1991-077E	Kosmos-2169	Strela-3	S21783 MO SSSR							
			1991-077F	Kosmos-2170	Strela-3	S21784 MO SSSR							
1991-078	1991 Nov 20	1915?	1991-078A	Kosmos-2171	Kobal't	S21787 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3		RAEX	
			1991-078	Spuskaemiy Kapsula	SpK	A04112 MOM							
			1991-078	Spuskaemiy Kapsula	SpK	A04116 MOM							
1991-079	1991 Nov 22	1327:00	1991-079A	Kosmos-2172	Geizer No. 18L	S21789 MOM	Proton-K/DM-2	353-02	GIK-5	LC81/23		NK9422-47	
1991-080	1991 Nov 24	2344:00	1991-080A	Atlantis	OV-104	S21795 NASA JSC	Space Shuttle	STS-44	MLP1, KSC	LC39A		STSJSC	
			1991-080B	DSP F16	DSP F16	S21805 USAF							
1991-081	1991 Nov 27	0330:26	1991-081A	Kosmos-2172	Parus	S21796 MO SSSR	Kosmos 11K65M	65048-409	NIIP-53	LC133/3		NK9910-34	
1991-082	1991 Nov 28	1323	1991-082A	DMSF F11	DMSF S-12	S21798 USAF	Atlas E	53E	V	SLC3W		Wire	
1991-083	1991 Dec 7	2247	1991-083A	Eutelsat II F-3	Eutelsat II F-3	S21803 Eutelsat	Atlas II	AC-102	CC	LC36B		Wire	
1991-084	1991 Dec 16	2319:48	1991-084B	Inmarsat II F-3	Inmarsat II F-3	S21814 Inmarsat	Ariane 44L	V48	CSG	ELA2		CNES32	
			1991-084A	Telecom 2A	Telecom 2A	S21813 France Tel							
1991-085	1991 Dec 17	1100?	1991-085A	Kosmos-2174	Kometa No. 14	S21816 MOM	Soyuz 11A511U	-	GIK-5	LC31		RAEX	
1991-086	1991 Dec 18	0354:00	1991-086A	Interkosmos-25	AUOS-Z No. 301 (APEKS-1K)	S21819 RKA	Tsiklon-3	-	NIIP-53	-		NK9521-43	
			1991-086E	Magion-3	S2-AP	S21835 Czech							
1991-087	1991 Dec 19	1141:00	1991-087A	Raduga	Gran' No. 39L	S21821 MOM	Proton-K/DM-2	355-01	GIK-5	LC81/23		NK9810-25	
1991-088	1991 Dec 28	1200?	1991-088A	Zhongxing 4	DFH 2A-4	S21833 Chinasant	Chang Zheng 3	CZ3-8	(26) XSC	LC1		RAE	
1992-001	1992 Jan 21	1500:00	1992-001A	Kosmos-2175	Kobal't	S21844 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3		NK9305-11	
			1992-001	Spuskaemiy Kapsula	SpK	A04134 MOM							
			1992-001	Spuskaemiy Kapsula	SpK	A04137 MOM							
1992-002	1992 Jan 22	1452:33	1992-002A	Discovery	OV-103	S21846 NASA JSC	Space Shuttle	STS-42	MLP3, KSC	LC39A		STSJSC	
			1992-002	Spacelab IML-1	Spacelab Long Module	A04127 NASA MSFC							
			1992-002	GBA-3	GAS Bridge	A04128 NASA GSFC							
1992-003	1992 Jan 24	0118:01	1992-003A	Kosmos-2176	Oko	S21847 MOM	Molniya 8K78M	-	NIIP-53	LC43/3		NK9715-48	
1992-004	1992 Jan 25	0750:17	1992-004A	Progress M-11	Progress 7K-TGM No. 212	S21851 MOM	Soyuz 11A511U2	R15000-058	GIK-5	LC1		NK9807-46	
1992-005	1992 Jan 29	2219:12	1992-005A	Kosmos-2177	Uragan No. 68L	S21853 MOM	Proton-K/DM-2	372-02	GIK-5	LC81/23		NK9810-25	
			1992-005B	Kosmos-2178	Uragan No. 69L	S21854 MOM							
			1992-005C	Kosmos-2179	Uragan No. 71L	S21855 MOM							
1992-F01	1992 Feb 5		1992-F01	-	Tselina-2	F01101 MO RF	Zenit-2	-	GIK-5	LC45/1		AVMNLJ	
1992-006	1992 Feb 11	0041	1992-006A	USA 78	DSCS III B-14	S21873 USAF	Atlas II	AC-101	CC	LC36A		Wire	
1992-007	1992 Feb 11	0150	1992-007A	Fuyo 1	ERS-1	S21867 NASDA	H-1	H-24 (F)	TNSC	N		WWW-NASDA	
1992-008	1992 Feb 17	2205:08	1992-008A	Kosmos-2180	Parus	S21875 MO RF	Kosmos 11K65M	65078-418	NIIP-53	LC133/3		NK9305-11	
1992-009	1992 Feb 23	2229	1992-009A	Navstar GPS 25	Navstar SVN 25	S21890 USAF	Delta 7925	D207	CC	LC17B		Wire	
1992-010	1992 Feb 26	2358:10	1992-010A	Superbird B1	Superbird B1	S21893 SCC	Ariane 44L	V49	CSG	ELA2		CNES32	
			1992-010B	Arabsat 1C	Arabsat 1C	S21894 Arabsat							
1992-011	1992 Mar 4	0427:00	1992-011A	Molniya-1	Molniya-1T	S21897 MOM	Molniya 8K78M	-	NIIP-53	LC43/4		NK9305-11	
1992-012	1992 Mar 9	2235:59	1992-012A	Kosmos-2181	Tsikada	S21902 MO RF	Kosmos 11K65M	53778-423	NIIP-53	LC132/1		NK9305-11	
1992-013	1992 Mar 14	0000	1992-013A	Galaxy V	Galaxy V	S21906 HCI	Atlas I	AC-72	CC	LC36B		Wire	
1992-014	1992 Mar 17	1054:30	1992-014A	Soyuz TM-14	Soyuz 7K-STM No. 64	S21908 MOM	Soyuz 11A511U2	-	GIK-5	LC1		VSA030	
1992-015	1992 Mar 24	1313:39	1992-015A	Atlantis	OV-104	S21915 NASA JSC	Space Shuttle	STS-45	MLP1, KSC	LC39A		STSJSC	
			1992-015	Atlas 1 Fwd	Atlas 1	A04141 NASA MSFC							
			1992-015	Atlas 1 Aft	Atlas 1	A04142 NASA MSFC							
1992-016	1992 Apr 1	1418:00	1992-016A	Kosmos-2182	Kobal't	S21920 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2		NK9305-11	
			1992-016	Spuskaemiy Kapsula	SpK	A04149 MOM							
			1992-016	Spuskaemiy Kapsula	SpK	A04156 MOM							
1992-017	1992 Apr 2	0150:00	1992-017A	Gorizont	Gorizont No. 36L	S21922 MOM	Proton-K/DM-2	369-01	GIK-5	LC81/23		NK9602-24	
1992-018	1992 Apr 8	1220:00	1992-018A	Kosmos-2183	Neman	S21928 MOM	Soyuz 11A511U	-	GIK-5	LC31		NK9305-11	
1992-019	1992 Apr 10	0320	1992-019A	Navstar GPS 28	Navstar SVN 28	S21930 USAF	Delta 7925	D208	CC	LC17B		Wire	
1992-020	1992 Apr 15	0717:43	1992-020A	Kosmos-2184	Parus	S21937 MO RF	Kosmos 11K65M	47178-419	NIIP-53	LC132/1		NK9305-11	
1992-021	1992 Apr 15	2325:27	1992-021B	Inmarsat II F-4	Inmarsat II F-4	S21940 Inmarsat	Ariane 44L	V50	CSG	ELA2		CNES32	
			1992-021A	Telecom 2B	Telecom 2B	S21939 France Tel							
1992-022	1992 Apr 19	2129:25	1992-022A	Progress M-12	Progress 7K-TGM No. 213	S21946 MOM	Soyuz 11A511U2	R15000-059	GIK-5	LC1		NK9807-46	
			1992-022	VBK Raduga	VBK	A04175 MOM							
1992-023	1992 Apr 25	0853	1992-023A	USA 81	SBWASS R3	S21949 USAF	Titan II SLV	23G-3	V	SLC4W		Wire	
1992-024	1992 Apr 29	0900:00	1992-024A	Resurs-F	Resurs-F2 17F42 No. 8	S21951 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4		NK95-20-29	
1992-025	1992 Apr 29	1010:00	1992-025A	Kosmos-2185	Kometa No. 15	S21953 MOM	Soyuz 11A511U	-	GIK-5	LC1		NK9305-11	
1992-026	1992 May 7	2340:00	1992-026A	Endeavour	OV-105	S21963 NASA JSC	Space Shuttle	STS-49	MLP2, KSC	LC39B		STSJSC	
			1992-026	ASEM	MPESS-ASEM	A04159 NASA JSC							
			1992-026	Intelsat Cradle	Intelsat Cradle	A04160 NASA JSC							
			1992-026	Orbus 21S	Orbus 21S	A04157 Intelsat							
1992-027	1992 May 14	0040	1992-027A	Palapa B4	Palapa B4	S21964 PT Telkom	Delta 7925	D209	CC	LC17B		Wire	
1992-028	1992 May 20	0030	1992-028A	SROSS-C	SROSS-C	S21968 ISRO	ASLV	ASLV-D3	SHAR	SLV		JCM	
1992-029	1992 May 28	1909:59	1992-029A	Kosmos-2186	Kobal't	S21973 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2		NK9305-11	
			1992-029	Spuskaemiy Kapsula	SpK	A04167 MOM							
			1992-029	Spuskaemiy Kapsula	SpK	A04177 MOM							
1992-030	1992 Jun 3	0050:30	1992-030A	Kosmos-2187	Strela-1M	S21976 MO RF	Kosmos 11K65M	53742-114	NIIP-53	LC133/3		NK9305-11	
			1992-030B	Kosmos-2188	Strela-1M	S21977 MO RF							
			1992-030C	Kosmos-2189	Strela-1M	S21978 MO RF							
			1992-030D	Kosmos-2190	Strela-1M	S21979 MO RF							
			1992-030E	Kosmos-2191	Strela-1M	S21980 MO RF							
			1992-030F	Kosmos-2192	Strela-1M	S21981 MO RF							
			1992-030G	Kosmos-2193	Strela-1M	S21982 MO RF							
			1992-030H	Kosmos-2194	Strela-1M	S21983 MO RF							



1992-031	1992 Jun 7 1640	1992-031A	EUVE	EUVE	S21987 NASA GSFC	Delta 6920-10	D210	CC	LC17A	Wire
1992-032	1992 Jun 10 0000	1992-032A	Intelsat K (NSS K)	Intelsat K	S21989 Intelsat	Atlas IIA	AC-105	CC	LC36B	Wire
1992-033	1992 Jun 23 0800:00	1992-033A	Resurs-F	Resurs-F1 14F43 No. 55	S21998 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK95-20-29
1992-034	1992 Jun 25 1612:22	1992-034A	Columbia	OV-102	S22000 NASA JSC	Space Shuttle	STS-50	MLP3,KSC	LC39A	STJSJSC
		1992-034	USML-1	Spacelab Long Module	A04173 NASA MSFC					
		1992-034	EDO	EDO	A04174 NASA JSC					
1992-035	1992 Jun 30 1643:13	1992-035A	Progress M-13	Progress 7K-TGM No. 214	S22004 MOM	Soyuz 11A511U2	15000-062	GIK-5	LC31	NK9807-46
1992-036	1992 Jul 1 2016:22	1992-036A	Kosmos-2195	Parus	S22006 MO RF	Kosmos 11K65M	65072-427	NIIP-53	LC133/3?	NK9305-11
1992-037	1992 Jul 2 2154	1992-037A	USA 82	DSCS III B-12	S22009 USAF	Atlas II	AC-103	CC	LC36A	AWST920706-17
1992-038	1992 Jul 3 1419	1992-038A	SAMPEX	SAMPEX	S22012 NASA GSFC	Scout G-1	S215C	V	SLC5	AWST920713-19
1992-039	1992 Jul 7 0920	1992-039A	Navstar GPS 26	Navstar SVN 26	S22014 USAF	Delta 7925	D211	CC	LC17B	Wire
1992-040	1992 Jul 8 0953:14	1992-040A	Kosmos-2196	Oko	S22017 MOM	Molniya 8K78M	-	NIIP-53	LC43/3	NK9715-48
1992-041	1992 Jul 9 2242:19	1992-041A	Insat 2A	Insat 2A	S22027 ISRO	Ariane 44L	V51	CSG	ELA2	CNES32
		1992-041B	Eutelsat IIF4	Eutelsat IIF4	S22028 Eutelsat					
1992-042	1992 Jul 13 1741:40	1992-042A	Kosmos-2197	Strela-3	S22034 MO RF	Tsiklon-3	-	NIIP-53	-	JCM
		1992-042B	Kosmos-2198	Strela-3	S22035 MO RF					
		1992-042C	Kosmos-2199	Gonets-D	S22036 MO RF					
		1992-042D	Kosmos-2200	Strela-3	S22037 MO RF					
		1992-042E	Kosmos-2201	Gonets-D	S22038 MO RF					
		1992-042F	Kosmos-2202	Strela-3	S22039 MO RF					
1992-043	1992 Jul 14 2202:00	1992-043A	Gorizont	Gorizont No. 37L	S22041 MOM	Proton-K/DM-2	371-02	GIK-5	LC81/23	NK9602-24
1992-044	1992 Jul 24 1426	1992-044A	Geotail	Geotail	S22049 ISAS	Delta 6925	D212	CC	LC17A	Wire
		1992-044B	DUVE	DUVE	A04183 NASA GSFC					
1992-045	1992 Jul 24 1940:00	1992-045A	Kosmos-2203	Kobal't	S22052 MOM	Soyuz 11A511U	-	NIIP-53	LC43/3	NK9305-11
		1992-045	Spuskaemiy Kapsula	Spk	A04186 MOM					
		1992-045	Spuskaemiy Kapsula	Spk	A04203 MOM					
1992-046	1992 Jul 27 0608:42	1992-046A	Soyuz TM-15	Soyuz 7K-STM No. 65	S22054 MOM	Soyuz 11A511U2	-	GIK-5	LC1	VSA031
1992-047	1992 Jul 30 0159:01	1992-047A	Kosmos-2204	Uragan No. 56L	S22056 MOM	Proton-K/DM-2	376-01	GIK-5	LC81/23	NK9810-25
		1992-047B	Kosmos-2205	Uragan No. 72L	S22057 MOM					
		1992-047C	Kosmos-2206	Uragan No. 74L	S22058 MOM					
1992-048	1992 Jul 30 1100:00	1992-048A	Kosmos-2207	Oblik	S22062 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	NK9305-11
1992-049	1992 Jul 31 1356:48	1992-049A	Atlantis	OV-104	S22064 NASA JSC	Space Shuttle	STS-46	MLP1,KSC	LC39B	STJSJSC
		1992-049B	Eureca 1	Eureca 1	S22065 ESA					
		1992-049	TSS-1 PLT	TSS-1 PLT	A04189 NASA MSFC					
		1992-049	TSS-1 MPESS	TSS-1 MPESS	A04190 NASA MSFC					
		1992-049	TSS-1	TSS-1	A04188 ASI					
		1992-049	EOIM-3/TEMP2A-3	EOIM-3	A04191 NASA GSFC					
1992-050	1992 Aug 6 1930:59	1992-050A	Molniya-1	Molniya-1T	S22068 MOM	Molniya 8K78M	-	NIIP-53	LC43/3	NK9305-11
1992-051	1992 Aug 9 0800	1992-051A	FSW-2 1	FSW-2 1	S22072 MAI	Chang Zheng 2D	C22D-1 (27)	JQ	LA2B?	MTR-4
		1992-051	FSW-2 RV	FSW-2 RV	A04184 MAI					
1992-052	1992 Aug 10 2308:07	1992-052A	Topex-Poseidon	Topex-Poseidon	S22076 JPL/CNES	Ariane 42P	V52	CSG	ELA2	CNES32
		1992-052B	Kitsat A	Kitsat A	S22077 KAIST					
		1992-052C	S80/T	S80/T	S22078 CNES					
1992-053	1992 Aug 12 0544:01	1992-053A	Kosmos-2208	Strela-2	S22080 MO RF	Kosmos 11K65M	65078-421	NIIP-53	LC132/1	NK9317-22
1992-054	1992 Aug 13 2300	1992-054A	Optus B1	Optus B1	S22087 Optus	Chang Zheng 2E	C22E-2 (28)	XSC	LC2	SN920817-2
1992-055	1992 Aug 15 2218:32	1992-055A	Progress M-14	Progress 7K-TGM No. 209	S22090 MOM	Soyuz 11A511U2	U15000-064	GIK-5	LC31	NK9807-46
		1992-055	VBK Raduga	VBK	A04220 MOM					
1992-056	1992 Aug 19 1020:00	1992-056A	Resurs-F	Resurs-F1 14F43 No. 54	S22093 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK95-20-29
		1992-056C	Pion-Germes-1	Pion-Germes-1	S22099 MOM					
		1992-056D	Pion-Germes-2	Pion-Germes-2	S22100 MOM					
1992-F02	1992 Aug 22 2240	1992-F02	Galaxy IR	Galaxy IR	F01103 HCI	Atlas I	AC-71	CC	LC36B	AWST920831-22
1992-057	1992 Aug 31 1041	1992-057A	Satcom C4	Satcom C4	S22096 GE Americom	Delta 7925	D213	CC	LC17B	Wire
1992-058	1992 Sep 9 0857	1992-058A	Navstar GPS 27	Navstar SVN 27	S22108 USAF	Delta 7925	D214	CC	LC17A	AWST920914-17
1992-059	1992 Sep 10 1801:18	1992-059A	Kosmos-2209	Oko?	S22112 MOM	Proton-K/DM-2	363-01	GIK-5	LC81/23	NK9810-25
1992-060	1992 Sep 10 2304:00	1992-060A	Hispasat 1A	Hispasat 1A	S22116 Hispasat	Ariane 44LP	V53	CSG	ELA2	CNES32
		1992-060B	Satcom C3	Satcom C3	S22117 GE Americom					
1992-061	1992 Sep 12 1423:00	1992-061A	Endeavour	OV-105	S22120 NASA JSC	Space Shuttle	STS-47	MLP2,KSC	LC39B	STJSJSC
		1992-061	Spacelab J LM	Spacelab Long Module	A04211 NASDA					
		1992-061	GAS Bridge	GAS Bridge	A04212 NASA GSFC					
1992-062	1992 Sep 22 1610:00	1992-062A	Kosmos-2210	Kobal't	S22133 MOM	Soyuz 11A511U	-	NIIP-53	LC16/2	NK9305-11
		1992-062	Spuskaemiy Kapsula	Spk	A04216 MOM					
		1992-062	Spuskaemiy Kapsula	Spk	A04231 MOM					
1992-063	1992 Sep 25 1705	1992-063A	Mars Observer	Mars Observer	S22136 NASA JPL	Commercial Titan 3	CT-4	CC	LC40	Wire
1992-064	1992 Oct 6 0620:05	1992-064B	FSW-1 13	FSW-1 13	S22162 MAI	Chang Zheng 2C	C22C-13 (29)	JQ	LA2B?	Grahn-pc
		1992-064	FSW-1 RV	FSW RV	A04214 MAI					
		1992-064A	Freja	Freja	S22161 SSC					
1992-065	1992 Oct 8 1900:00	1992-065A	Foton	Foton No. 8L	S22173 MOM	Soyuz 11A511U	-	NIIP-53	LC43/4	AVMP
1992-066	1992 Oct 12 0947	1992-066A	Kopernikus 3	DFS 3	S22175 Bundespost	Delta 7925	D215	CC	LC17B	SN921019-11
1992-067	1992 Oct 14 1958:00	1992-067A	Molniya-3	Molniya-3 No. 50	S22178 MOM	Molniya 8K78M	-	NIIP-53	LC43/3	NK9305-11
1992-068	1992 Oct 20 1258:12	1992-068A	Kosmos-2211	Strela-3	S22182 MO RF	Tsiklon-3	-	NIIP-53	-	JCM
		1992-068B	Kosmos-2212	Strela-3	S22183 MO RF					
		1992-068C	Kosmos-2213	Strela-3	S22184 MO RF					
		1992-068D	Kosmos-2214	Strela-3	S22185 MO RF					
		1992-068E	Kosmos-2215	Strela-3	S22186 MO RF					
		1992-068F	Kosmos-2216	Strela-3	S22187 MO RF					
1992-069	1992 Oct 21 1021:22	1992-069A	Kosmos-2217	Oko	S22189 MOM	Molniya 8K78M	-	NIIP-53	LC16/2	NK9715-48
1992-070	1992 Oct 22 1709:40	1992-070A	Columbia	OV-102	S22194 NASA JSC	Space Shuttle	STS-52	MLP3,KSC	LC39B	STJSJSC
		1992-070B	Lageos 2	Lageos 2	S22195 ASI					
		1992-070C	CTA	CTA	S22214 CSA					
		1992-070	USMP-1 Fwd	MPESS	A04223 NASA MSFC					
		1992-070	USMP-1 Aft	MPESS	A04224 NASA MSFC					
1992-071	1992 Oct 27 1719:41	1992-071A	Progress M-15	Progress 7K-TGM No. 215	S22203 MOM	Soyuz 11A511U2	15000-061	GIK-5	LC31	NK9807-46





1993-027	1993 Apr 26 1450:00	1993-027A 1993-027A 1993-027A	Columbia Spacelab D-2 LM USS	OV-102 Spacelab Long Module USS	S22640 NASA JSC A04297 DARA A04298 DARA	Space Shuttle	STS-55	MLP3, KSC	LC39A	STSJSC
1993-028	1993 Apr 27 1035:00	1993-028A	Kosmos-2243	Kosmos No. 16	S22641 MOM	Soyuz 11A511U	-	GIK-5	LC31	NK9317-20
1993-029	1993 Apr 28 0339:20	1993-029A	Kosmos-2244	US-P	S22643 MO RF	Tsiklon-2	-	GIK-5	-	NK9317-20
1993-030	1993 May 11 1456:01	1993-030A 1993-030B 1993-030C 1993-030D 1993-030E 1993-030F	Kosmos-2245 Kosmos-2246 Kosmos-2247 Kosmos-2248 Kosmos-2249 Kosmos-2250	Strela-3 Strela-3 Strela-3 Strela-3 Strela-3 Strela-3	S22646 MO RF S22647 MO RF S22648 MO RF S22649 MO RF S22650 MO RF S22651 MO RF	Tsiklon-3	-	GNIIP	-	AVMP
1993-031	1993 May 12 0056:32	1993-031B 1993-031A	Arsene Astra 1C	Arsene Astra 1C	S22654 RACE S22653 SES	Ariane 42L	V56	CSG	ELA2	CNES32
1993-032	1993 May 13 0007	1993-032A	Navstar GPS 37	Navstar SVN 37	S22657 USAF	Delta 7925	D220	CC	LC17A	Wire
1993-033	1993 May 21 0915:01	1993-033A	Resurs-F	Resurs-F2 17F42 No. 9	S22663 MOM	Soyuz 11A511U	-	GNIIP	LC16/2	NK95-20-29
1993-034	1993 May 22 0641:47	1993-034A 1993-034	Progress M-18 VBK Raduga	Progress 7K-TGM No. 218 VBK	S22666 MOM A04324 MOM	Soyuz 11A511U2	-	GIK-5	LC1	NK9317-20
1993-035	1993 May 26 0323?	1993-035A	Molniya-1	Molniya-1T No. 81	S22671 MOM	Molniya 8K78M	-	GNIIP	LC43/4	RAEX
1993-F01	1993 May 27 0122:00	1993-F01	Gorizont	Gorizont No. 39L	F01110 MOM	Proton-K/DM-2	364-02	GIK-5	LC81/23	NK9602-24
1593-036	1993 Jun 16 0417:00	1993-036A	Kosmos-2251	Strela-2	S22675 MO RF	Kosmos 11K65M	47135-601	GNIIP	LC132/1	NK9317-20
1993-037	1993 Jun 21 1307:22	1993-037A 1993-037 1993-037	Endeavour Spacehab SH-01 SHOOT	OV-105 Spacehab 1 SHOOT	S22684 NASA JSC A04318 Spacehab A04319 NASA MSFC	Space Shuttle	STS-57	MLP2, KSC	LC39B	STSJSC
1993-038	1993 Jun 24 0412:41	1993-038A 1993-038B 1993-038C 1993-038D 1993-038E 1993-038F	Kosmos-2252 Kosmos-2253 Kosmos-2254 Kosmos-2255 Kosmos-2256 Kosmos-2257	Strela-3 Strela-3 Strela-3 Strela-3 Strela-3 Strela-3	S22687 MO RF S22688 MO RF S22689 MO RF S22690 MO RF S22691 MO RF S22692 MO RF	Tsiklon-3	-	GNIIP	-	AVMP
1993-039	1993 Jun 25 0018:00	1993-039A	Galaxy 4H	Galaxy 4H	S22694 HCI	Ariane 42P	V57	CSG	ELA2	CNES32
1993-040	1993 Jun 25 0820:00	1993-040A	Resurs-F	Resurs-F1 14F43 No. 57	S22696 MOM	Soyuz 11A511U	-	GNIIP	LC16/2	NK95-20-29
1993-041	1993 Jun 25 2330	1993-041A	RADCAL	RADCAL	S22698 USAF 30SW	Scout G-1	S217C	V	SLC5	Wire
1993-042	1993 Jun 26 1327	1993-042A 1993-042B 1993-042	Navstar GPS 39 PMG PMG Far End Package	Navstar SVN 39 Plasma Motor Generator PMG Far End Package	S22700 USAF A04321 NASA JSC A04322 NASA JSC	Delta 7925	D221	CC	LC17A	Wire
1993-043	1993 Jul 1 1432:58	1993-043A	Soyuz TM-17	Soyuz 7K-STM No. 66	S22704 MOM	Soyuz 11A511U2	-	GIK-5	LC1	AVMP
1993-044	1993 Jul 7 0715:00	1993-044A	Kosmos-2258	US-P	S22709 MO RF	Tsiklon-2	-	GIK-5	-	AVMP
1993-045	1993 Jul 14 1640:00	1993-045A 1993-045 1993-045 1993-045	Kosmos-2259 Spuskaemiy Kapsula Spuskaemiy Kapsula USA 93	Kobal't SpK SpK DSCS III B-9	S22716 MOM A04328 MOM A04330 MOM S22719 USAF	Soyuz 11A511U	-	GNIIP	LC43/3	WSL
1993-046	1993 Jul 19 2204	1993-046A	USA 93	DSCS III B-9	S22719 USAF	Atlas II	AC-104	CC	LC36A	SN930726-9
1993-047	1993 Jul 22 0845:00	1993-047A	Kosmos-2260	Resurs-T	S22721 MOM	Soyuz 11A511U	-	GNIIP	LC43/3	NK96-26-40
1993-048	1993 Jul 22 2258:55	1993-048A 1993-048B	Hispasat 1B Insat 2B	Hispasat 1B Insat 2B	S22723 Hispasat S22724 ISRO	Ariane 44L	V58	CSG	ELA2	CNES32
1993-F02	1993 Aug 2 1959	1993-F02 1993-F02 1993-F02 1993-F02 1993-F02 1993-F02 1993-F02	- - - - - - TLD	NOSS B-3 SSU SSU SSU TLD	F01112 USN F01113 USN F01114 USN F01115 USN F01116 NRO/NRL	Titan 403A	K-11 (45F-9)	V	SLC4E	Wire
1993-049	1993 Aug 4 0052:00	1993-049A	Molniya-3	Molniya-3 No. 58	S22729 MOM	Molniya 8K78M	-	GNIIP	LC43/3	NK9815-26
1993-050	1993 Aug 9 1002	1993-050A	NOAA 13	NOAA I	S22739 NOAA	Atlas E	34E	V	SLC3W	Wire
1993-051	1993 Aug 10 1453:45	1993-051A	Kosmos-2261	Oko	S22741 MOM	Molniya 8K78M	-	GNIIP	LC16/2	NK9715-48
1993-052	1993 Aug 10 2223:45	1993-052A 1993-052	Progress M-19 VBK Raduga	Progress 7K-TGM No. 219 VBK	S22745 MOM A04349 MOM	Soyuz 11A511U	N15000-634	GIK-5	LC1	NK9807-46
1993-053	1993 Aug 24 1045:00	1993-053A	Resurs-F	Resurs-F1 14F43 No. 56	S22777 MOM	Soyuz 11A511U	-	GNIIP	LC16/2	NK95-20-29
1993-054	1993 Aug 30 1238	1993-054A	Navstar GPS 35	Navstar SVN 35	S22779 USAF	Delta 7925	D222	CC	LC17B	Wire
1993-055	1993 Aug 31 0440:00	1993-055A 1993-055B 1993-055C	Meteor-2 Temisat UHF F/O F2	Meteor-2 No. 24 Temisat UFO F2	S22782 RKA S22783 Telespazio S22787 HCI	Tsiklon-3	-	GNIIP	-	AVMP
1993-056	1993 Sep 3 1117	1993-056A	Kosmos-2262	Don	S22789 MOM	Atlas I	AC-75	CC	LC36B	Wire
1993-057	1993 Sep 7 1325:00	1993-057A 1993-057 1993-057 1993-057 1993-057 1993-057 1993-057 1993-057 1993-057 1993-057 1993-057	Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula Spuskaemiy Kapsula	SpK SpK SpK SpK SpK SpK SpK SpK SpK SpK SpK	A04256 MOM A04257 MOM A04258 MOM A04259 MOM A04260 MOM A04261 MOM A04262 MOM	Soyuz 11A511U2	-	GIK-5	LC31	AVMP
1993-058	1993 Sep 12 1145:00	1993-058A 1993-058B 1993-058C 1993-058A	Discovery ACTS ORFEUS-SPAS Kosmos-2263	OV-103 ACTS ASTRO-SPAS Tselina-2	S22795 NASA JSC S22796 NASA LeRC S22798 DARA S22802 MO RF	Space Shuttle	STS-51	MLP3, KSC	LC39B	STSJSC
1993-059	1993 Sep 16 0736:19	1993-059A	Kosmos-2264	US-P	S22808 MO RF	Zenit-2	-	GIK-5	LC45/1	AVMP
1993-060	1993 Sep 17 0043:10	1993-060A	Kosmos-2264	US-P	S22808 MO RF	Tsiklon-2	-	GIK-5	-	AVMP
1993-F03	1993 Sep 20 0512	1993-F03	IRS-1E	IRS-1E	F01118 ISRO	PSLV	PSLV-D1	SHAR	PSLV	SN930927-28
1993-061	1993 Sep 26 0145:00	1993-061A 1993-061B 1993-061C 1993-061D 1993-061E 1993-061F 1993-061G 1993-062A	SPOT 3 Stella Eyesat 1/AMRAD-Oscar-27 Healthsat 2 ITAMsat Uribyol 2 Posat 1 Raduga	SPOT 3 Stella Eyesat 1 Healthsat 2 Healthsat 2 ITAMsat KITSAT-2 Posat 1 Gran' No. 41L	S22823 CNES S22824 CNES S22825 Interfer. S22826 Satelife S22827 AMSAT-I S22828 KAIST S22829 INETI S22836 MOM	Ariane 40	V59	CSG	ELA2	CNES32
1993-062	1993 Sep 30 1705:59	1993-062A	Raduga	Gran' No. 41L	S22836 MOM	Proton-K/DM-2	359-01	GIK-5	LC81/23	NK9810-25

1993-F04	1993 Oct 5 1756	1993-F04	Landsat 6	Landsat 6	F01120 Eosat	Titan II SLV	23G-5	V	SLC4W	Wire
1993-063	1993 Oct 8 0800	1993-063A	Jian Bing 93	FSW-1 14	S22859 CASC	Chang Zheng 2C	CZ2C-14 (31)	JQ	LA2B?	MTR-4
		1993-063H	FSW-1 RV	FSW-1 RV	S22870 CASC					
1993-064	1993 Oct 11 2133:19	1993-064A	Progress M-20	Progress 7K-TGM No. 220	S22867 MOM	Soyuz 11A511U	77044270	GIK-5	LC1	NK9807-46
		1993-064	VBK Raduga	VBK	A04357 MOM					
1993-065	1993 Oct 18 1453:10	1993-065A	Columbia	OV-102	S22869 NASA JSC	Space Shuttle	STS-58	MLP1, KSC	LC39B	STSJSC
		1993-065	Spacelab SLS 2 LM	Spacelab Long Module	A04353 NASA MSFC					
		1993-065	EDO	EDO	A04354 NASA JSC					
1993-066	1993 Oct 22 0646:00	1993-066A	Intelsat 701	Intelsat 701	S22871 Intelsat	Ariane 44LP	V60	CSG	ELA2	CNES32
1993-067	1993 Oct 26 1000:04	1993-067A	Kosmos-2265	Yug	S22875 MO RF	Kosmos 11K65M	65065-624	GNIIP	LC132/1	AVMP
1993-068	1993 Oct 26 1704	1993-068A	Navstar GPS 34	Navstar SVN 34	S22877 USAF	Delta 7925	D223	CC	LC17B	Wire
1993-069	1993 Oct 28 1517:00	1993-069A	Gorizont	Gorizont No. 40L	S22880 MOM	Proton-K/DM-2	368-01	GIK-5	LC81/23	NK9602-24
1993-070	1993 Nov 2 1210:09	1993-070A	Kosmos-2266	Parus	S22888 MO RF	Kosmos 11K65M	53735-608	GNIIP	LC132/1	AVMP
1993-071	1993 Nov 5 0825:00	1993-071A	Kosmos-2267	Neman	S22904 MOM	Soyuz 11A511U	-	GIK-5	LC1	AVMP
1993-072	1993 Nov 18 1354:59	1993-072A	AP-1	Gorizont No. 41L	S22907 MOM	Proton-K/DM-2	367-01	GIK-5	LC81/23	NK9602-24
1993-073	1993 Nov 20 0117:00	1993-073A	Solidaridad 1	Solidaridad 1	S22911 Tele Mexico	Ariane 44LP	V61	CSG	ELA2	CNES32
		1993-073B	Meteosat 6	MOP 3	S22912 ESA					
1993-074	1993 Nov 28 2340	1993-074A	USA 97	DSCS III B-10	S22915 USAF	Atlas II	AC-106	CC	LC36A	Wire
1993-075	1993 Dec 2 0927:00	1993-075A	Endeavour	OV-105	S22917 NASA JSC	Space Shuttle	STS-61	MLP2, KSC	LC39B	STSJSC
		1993-075	SAC	SAC	A04359 NASA GSFC					
		1993-075	ORUC	ORUC	A04360 NASA GSFC					
		1993-075	FSS	FSS	A04361 NASA GSFC					
1993-076	1993 Dec 8 0048	1993-076A	NATO 4B	NATO 4B	S22921 NATO	Delta 7925	D224	CC	LC17A	Wire
1993-077	1993 Dec 16 0038	1993-077A	Telstar 401	Telstar 401	S22927 AT&T	Atlas 11AS	AC-108	CC	LC36B	Wire
1993-078	1993 Dec 18 0127:00	1993-078A	DBS 1	DBS 1	S22930 HCI	Ariane 44L	V62	CSG	ELA2	CNES32
		1993-078B	Thaicom 1	Thaicom 1	S22931 Shinawatra					
1993-079	1993 Dec 22 2037:16	1993-079A	Molniya-1T	Molniya-1T	S22949 MOM	Molniya 8K78M	-	GNIIP	LC43/3	AVMP
1994-001	1994 Jan 8 1005:34	1994-001A	Soyuz TM-18	Soyuz 7K-STM No. 67	S22957 MOM	Soyuz 11A511U2	-	GIK-5	LC1	NK9501-24
1994-002	1994 Jan 20 0949:00	1994-002A	Gals 1	Gals No. 11L	S22963 MOM	Proton-K/DM-2M	358-02	GIK-5	LC81/23	NK9501-24
1994-F01	1994 Jan 24 2137:00	1994-F01	Eutelsat 2 F5	Eutelsat 2 F5	F01122 Eutelsat	Ariane 44LP	V63	CSG	ELA2	CNES32
		1994-F01	Turksat 1A	Turksat 1A	F01124 Turk Telkom					
1994-003	1994 Jan 25 0025:00	1994-003A	Meteor-3	Meteor-3 No. 7	S22969 RKA	Tsikon-3	-	GNIIP	-	NK9402-34
		1994-003B	Tubsat-B	Tubsat-B	S22970 TUB					
1994-004	1994 Jan 25 1634	1994-004C	ISA	ISA	S22987 BMDO	Titan II SLV	23G-11	V	SLC4W	Wire
		1994-004A	Clementine 1	Clementine 1	S22973 BMDO					
1994-005	1994 Jan 28 0212:10	1994-005A	Progress M-21	Progress 7K-TGM No. 221	S22975 MOM	Soyuz 11A511U	N15000-635	GIK-5	LC1	NK9807-46
1994-006	1994 Feb 3 1210:00	1994-006A	Discovery	OV-103	S22977 NASA JSC	Space Shuttle	STS-60	MLP3, KSC	LC39A	STSJSC
		1994-006	Spacehab SH-02	Spacehab 2	A04374 Spacehab					
		1994-006	Wake Shield Facility	Wake Shield Facility	A04376 SII					
		1994-006	GBA-6	GBA	A04377 NASA GSFC					
		1994-006B	ODERACS A	ODERACS A	S22990 NASA JSC					
		1994-006C	ODERACS B	ODERACS B	S22991 NASA JSC					
		1994-006D	ODERACS C	ODERACS C	S22992 NASA JSC					
		1994-006E	ODERACS D	ODERACS D	S22993 NASA JSC					
		1994-006F	ODERACS E	ODERACS E	S22994 NASA JSC					
		1994-006G	ODERACS F	ODERACS F	S22995 NASA JSC					
		1994-006H	BREMSAT	BREMSAT	S22998 DARA/Bremen					
1994-007	1994 Feb 3 2220	1994-007A	Ryusei	OREX	S22978 NASDA/NAL	H-II	H-II-1F	TNSC	Y	AWST940207-17
		1994-007B	Myojo	VEP	S22979 NASDA					
1994-008	1994 Feb 5 0846:00	1994-008A	Raduga-1	Globus	S22981 MOM	Proton-K/DM-2	375-02	GIK-5	LC81/23	NK9501-24
1994-009	1994 Feb 7 2147	1994-009A	Milstar DFS 1	Milstar DFS 1	S22988 USAF	Titan 401A/Centaur	K-10 (45E-3)	CC	LC40	Wire
1994-010	1994 Feb 8 0834	1994-010B	Kua Fu 1	DFH-3 mockup	S23009 CASC	Chang Zheng 3A	CZ3A-1 (32)	XSC	LC2	WSL
		1994-010A	Shi Jian 4	Shi Jian 4	S22996 CASC					
1994-011	1994 Feb 12 0854:13	1994-011A	Kosmos-2268	Strela-3	S22999 MO RF	Tsikon-3	-	GNIIP	-	NK9501-24
		1994-011B	Kosmos-2269	Strela-3	S23000 MO RF					
		1994-011C	Kosmos-2270	Strela-3	S23001 MO RF					
		1994-011D	Kosmos-2271	Strela-3	S23002 MO RF					
		1994-011E	Kosmos-2272	Strela-3	S23003 MO RF					
		1994-011F	Kosmos-2273	Strela-3	S23004 MO RF					
1994-012	1994 Feb 18 0756:00	1994-012A	Raduga	Gran' No. 40L	S23010 MOM	Proton-K/DM-2	376-02	GIK-5	LC81/23	NK9501-24
1994-013	1994 Feb 19 2345	1994-013A	Galaxy 1R	Galaxy 1RR	S23016 HCI	Delta 7925-8	D225	CC	LC17B	Wire
1994-014	1994 Mar 2 0325:00	1994-014A	Koronas-I	AUOS-SM-KI-1K	S23019 RKA	Tsikon-3	-	GNIIP	-	NK9521-43
1994-015	1994 Mar 4 1353:00	1994-015A	Columbia	OV-102	S23025 NASA JSC	Space Shuttle	STS-62	MLP1, KSC	LC39B	STSJSC
		1994-015	USMP-2 Fwd	USMP-2	A04380 NASA MSFC					
		1994-015	USMP-2 Aft	USMP-2	A04381 NASA MSFC					
		1994-015	OAST-2	OAST-2	A04382 NASA GSFC					
		1994-015	EDO	EDO	A04383 NASA JSC					
1994-016	1994 Mar 10 0340	1994-016A	Navstar GPS 36	Navstar SVN 36	S23027 USAF	Delta 7925	D226	CC	LC17A	Wire
		1994-016B	SEDS 2 Deployer	SEDS 2 Deployer	A04389 NASA MSFC					
		1994-016	SEDS 2	SEDS 2 End Mass	A04390 NASA MSFC					
1994-017	1994 Mar 13 2232	1994-017A	STEP M0	P90-5	S23030 USAF	ARPA Taurus	T1 1110	V	576E	WSL
		1994-017B	DARPASAT	DARPASAT	S23031 DARPA					
1994-018	1994 Mar 17 1630:00	1994-018A	Kosmos-2274	Kobal't	S23033 MOM	Soyuz 11A511U	-	GNIIP	LC43/4?	NK9501-24
		1994-018	Spuskaemiy Kapsula	SpK	A04395 MOM					
		1994-018	Spuskaemiy Kapsula	SpK	A04407 MOM					
1994-019	1994 Mar 22 0454:12	1994-019A	Progress M-22	Progress 7K-TGM No. 222	S23035 MOM	Soyuz 11A511U	76032992	GIK-5	LC1	NK9807-46
1994-020	1994 Apr 9 1105:01	1994-020A	Endeavour	OV-105	S23042 NASA JSC	Space Shuttle	STS-59	MLP2, KSC	LC39A	STSJSC
		1994-020	MAPS	MAPS	A04397 JPL					
		1994-020	SRL-1	SRL PLT	A04398 JPL/DARA					
1994-021	1994 Apr 11 0749:22	1994-021A	Kosmos-2275	Uragan No. 58L	S23043 MOM	Proton-K/DM-2	377-01	GIK-5	LC81/23	NK9501-24
		1994-021B	Kosmos-2276	Uragan No. 60L	S23044 MOM					
		1994-021C	Kosmos-2277	Uragan No. 61L	S23045 MOM					

1994-022	1994 Apr 13 0604	1994-022A	GOES 8	GOES I	S23051 NOAA	Atlas I	AC-73	CC	LC36B	Wire
1994-023	1994 Apr 23 0801:59	1994-023A	Kosmos-2278	Tselina-2	S23087 MO RF	Zenit-2	-	GIK-5	LC45/1	AVMP
1994-024	1994 Apr 26 0214:15	1994-024A	Kosmos-2279	Parus	S23092 MO RF	Kosmos 11K65M	-	GNIIP	LC133/3	NK9501-24
1994-025	1994 Apr 28 1714:40	1994-025A	Kosmos-2280	Neman	S23095 MOM	Soyuz 11A511U	-	GIK-5	LC31	NK9501-24
1994-026	1994 May 3 1555	1994-026A	USA 103	TRUMPET 1	S23097 USAF/NSA	Titan 401A/Centaur	K-7 (45E-1)	CC	LC41	Wire
1994-027	1994 May 4 0000	1994-027A	SROSS-C2	SROSS-C2	S23099 ISRO	ASLV	ASLV-D4	SHAR	SLV	SPX-487
1994-028	1994 May 9 0247	1994-028A	MSTI-2	MSTI-2	S23101 USAF/SDIO	Scout G-1	S218C	V	SLC5	AWST940516-17
1994-029	1994 May 19 1703	1994-029A	STEP M2	STEP 2	S23105 USAF STP	Pegasus/HAPS	005/P5	NB-52 008,EAFB	R Wire	
1994-030	1994 May 20 0201:00	1994-030A	Rimsat-2	Horizont No. 42L	S23108 MOM	Proton-K/DM-2	357-01	GIK-5	LC81/23	NK9602-24
1994-031	1994 May 22 0430:04	1994-031A	Progress M-23	Progress 7K-TGM No. 223	S23114 MOM	Soyuz 11A511U	76024355	GIK-5	LC1	NK9807-46
		1994-031	VKB Raduga	VKB	A04415 MOM					
1994-F02	1994 May 25 1015:00	1994-F02	[Kosmos]	Tselina-D	F01126 MO RF	Tsiklon-3	-	GNIIP	LC32/2	NK9501-24
1994-032	1994 Jun 7 0720:00	1994-032A	Kosmos-2281	Oblik (Priroda)	S23119 MOM	Soyuz 11A511U	-	GNIIP	LC16/2	NK96-26-40
1994-033	1994 Jun 14 1605:00	1994-033A	Foton	Foton No. 9	S23122 MOM	Soyuz 11A511U	-	GNIIP	LC43/3	NK9501-24
1994-034	1994 Jun 17 0707:19	1994-034B	STRV 1A	STRV 1A	S23125 DRA	Ariane 44LP	V64	CSG	ELA2	CNES32
		1994-034C	STRV 1B	STRV 1B	S23126 DRA					
		1994-034A	Intelsat 702	Intelsat 702	S23124 Intelsat					
1994-035	1994 Jun 24 1350:02	1994-035A	UHF F/O F3	UFO F3	S23132 HCI	Atlas I	AC-76	CC	LC36B	Wire
1994-F03	1994 Jun 27 2115	1994-F03	STEP M1	STEP 1	F01128 USAF STP	Pegasus XL	F6	L-1011,V	RW30	Wire
1994-036	1994 Jul 1 1224:50	1994-036A	Soyuz TM-19	Soyuz 7K-STM No. 68	S23139 MOM	Soyuz 11A511U2	-	GIK-5	LC1	NK9501-24
1994-037	1994 Jul 3 0800	1994-037A	FSW-2 2	FSW-2 2	S23145 CASC	Chang Zheng 2D	CZ2D-2 (33)	JQ	LA2B?	WSL
		1994-037	FSW-2 RV	FSW-2 RV	A04413 CASC					
1994-038	1994 Jul 6 2358:51	1994-038A	Kosmos-2282	Prognoz	S23168 MOM	Proton-K/DM-2	365-02	GIK-5	LC81/23	NK9501-24
1994-039	1994 Jul 8 1643:00	1994-039A	Columbia	OV-102	S23173 NASA JSC	Space Shuttle	STS-65	MLP3,KSC	LC39A	STSJSC
		1994-039	Spacelab IML 2	Spacelab Long Module	A04420 NASA MSFC					
		1994-039	EDO	EDO	A04421 NASA JSC					
1994-040	1994 Jul 8 2305:32	1994-040B	BS-3N	BS-3N	S23176 NHK	Ariane 44L	V65	CSG	ELA2	CNES32
		1994-040A	PAS 2	Panamsat K1	S23175 Panamsat					
1994-041	1994 Jul 14 0513:30	1994-041A	Nadezhda	Tsikada-Kospas	S23179 MO RF	Kosmos 11K65M	-	GNIIP	LC133/3	NK9501-24
1994-042	1994 Jul 20 1735:00	1994-042A	Kosmos-2283	Kobal't	S23182 MOM	Soyuz 11A511U	-	GNIIP	LC43/4?	NK9501-24
		1994-042	Spuskaemiy Kapsula	SpK	A04427 MOM					
		1994-042	Spuskaemiy Kapsula	SpK	A04433 MOM					
1994-043	1994 Jul 21 1055	1994-043A	APSTAR 1	APSTAR 1	S23185 APT	Chang Zheng 3	CZ3-9 (34)	XSC	LC1	WSL
1994-044	1994 Jul 29 0930:00	1994-044A	Kosmos-2284	Kometa No. 17	S23187 MOM	Soyuz 11A511U	-	GIK-5	LC31	NK9501-24
1994-045	1994 Aug 2 2000:01	1994-045A	Kosmos-2285	Obzor No. 1	S23189 MO RF	Kosmos 11K65M	-	GNIIP	LC132/1	NK9501-24
1994-046	1994 Aug 3 1438	1994-046A	APEX	APEX	S23191 USAF STP	Pegasus	F7	NB-52 008,EAFB	R Wire	
1994-047	1994 Aug 3 2357	1994-047A	DBS 2	DBS 2	S23192 HCI	Atlas IIA	AC-107	CC	LC36A	Wire
1994-048	1994 Aug 5 0112:21	1994-048A	Kosmos-2286	Oko	S23194 MOM	Molniya 8K78M	-	GNIIP	LC16/2	NK9715-48
1994-049	1994 Aug 10 2305:24	1994-049B	Turksat 1B	Turksat 1B	S23200 Turk Telekom	Ariane 44LP	V66	CSG	ELA2	CNES32
		1994-049A	Brasilsat B1	Brasilsat B1	S23199 Tele Mexico					
1994-050	1994 Aug 11 1527:46	1994-050A	Kosmos-2287	Uragan No. 67L	S23203 MOM	Proton-K/DM-2	367-02	GIK-5	LC81/23	NK9501-24
		1994-050B	Kosmos-2288	Uragan No. 70L	S23204 MOM					
		1994-050C	Kosmos-2289	Uragan No. 75L	S23205 MOM					
1994-051	1994 Aug 23 1430:59	1994-051A	Molniya-3	Molniya-3 No. 60	S23211 MOM	Molniya 8K78M	-	GNIIP	LC43/4?	NK9501-24
1994-052	1994 Aug 25 1425:12	1994-052A	Progress M-24	Progress 7K-TGM No. 224	S23215 MOM	Soyuz 11A511U	N15000-636	GIK-5	LC1	NK9807-46
1994-053	1994 Aug 26 1200:00	1994-053A	Kosmos-2290	Orlets	S23218 MO RF	Zenit-2	-	GIK-5	LC45/1	AVMP
1994-054	1994 Aug 27 0858	1994-054A	USA 105	MERCURY 1	S23223 USAF/NSA	Titan 401A/Centaur	K-9 (45E-2)	CC	LC41	Wire
1994-055	1994 Aug 27 2310	1994-055A	Optus B3	Optus B3	S23227 Optus	Chang Zheng 2E	CZ2E-4 (35)	XSC	LC2	WSL
1994-056	1994 Aug 28 0750	1994-056A	Kiku-6	ETS-6	S23230 NASDA	H-II	H-II-2F	TNSC	Y	AWST940905-47
1994-057	1994 Aug 29 1738	1994-057A	DMSP 23545	DMSP S-11	S23233 USAF	Atlas E	20E	V	SLC3W	Wire
1994-058	1994 Sep 9 0029:44	1994-058	Telstar 402	Telstar 402	A04943 AT&T	Ariane 42L	V67	CSG	ELA2	CNES32
1994-059	1994 Sep 9 2222:53	1994-059A	Discovery	OV-103	S23251 NASA JSC	Space Shuttle	STS-64	MLP2,KSC	LC39B	STSJSC
		1994-059B	Spartan-201	Spartan-201	S23253 NASA GSFC					
		1994-059	LITE	LITE	A04436 NASA GSFC					
		1994-059	GBA-7	GBA	A04437 NASA GSFC					
1994-060	1994 Sep 21 1753:00	1994-060A	Kosmos-2291	Geizer No. 19L	S23267 MOM	Proton-K/DM-2	381-02	GIK-5	LC200/39	NK9422-47
1994-061	1994 Sep 27 1400:00	1994-061A	Kosmos-2292	Vektor	S23278 MO RF	Kosmos 11K65M	-	GNIIP	LC132/1	NK9501-24
1994-062	1994 Sep 30 1116:00	1994-062A	Endeavour	OV-105	S23285 NASA JSC	Space Shuttle	STS-68	MPL1,KSC	LC39A	STSJSC
		1994-062	MAPS	MAPS	A04448 JPL					
		1994-062	SRL-2	SRL PLT	A04449 JPL/DARA					
1994-063	1994 Oct 3 2242:30	1994-063A	Soyuz TM-20	Soyuz 7K-STM No. 69	S23288 MOM	Soyuz 11A511U2	-	GIK-5	LC1	NK9420-5
1994-064	1994 Oct 6 0635:02	1994-064A	Intelsat 703 (NSS 703)	Intelsat 703	S23305 Intelsat	Atlas IAS	AC-111	CC	LC36B	Wire
1994-065	1994 Oct 8 0107:00	1994-065B	Thaicom 2	Thaicom 2	S23314 Shinawatra	Ariane 44L	V68	CSG	ELA2	CNES32
		1994-065A	Solidaridad 2	Solidaridad 2	S23313 Tele Mexico					
1994-066	1994 Oct 11 1430:00	1994-066A	Okean	Okean-O1 No. 7 (NKhm 9)	S23317 RKA	Tsiklon-3	-	GNIIP	LC32/2	NK9422-49
1994-067	1994 Oct 13 1619:00	1994-067A	Ekspress 1	Ekspress No. 11L	S23319 MOM	Proton-K/DM-2M	377-02	GIK-5	LC200/39	NK9501-24
1994-068	1994 Oct 15 0505	1994-068A	IRS-P2	IRS-P2	S23323 ISRO	PSLV	PSLV-D2	SHAR	PSLV	WSL
1994-069	1994 Oct 31 1430:56	1994-069A	Elektro	Elektro No. 1L	S23327 MOM	Proton-K/DM-2	361-02	GIK-5	LC81/23	NK9501-24
1994-070	1994 Nov 1 0037:00	1994-070A	Astra 1D	Astra 1D	S23331 SES	Ariane 42P	V69	CSG	ELA2	CNES32
1994-071	1994 Nov 1 0931	1994-071A	WIND	WIND	S23333 NASA GSFC	Delta 7925-10	D227	CC	LC17B	Wire
1994-072	1994 Nov 2 0104:00	1994-072A	Kosmos-2293	US-P	S23336 MO RF	Tsiklon-2	-	GIK-5	-	NK9422-45
1994-073	1994 Nov 3 1659:43	1994-073A	Atlantis	OV-104	S23340 NASA JSC	Space Shuttle	STS-66	MPL3,KSC	LC39B	STSJSC
		1994-073	Atlas-3	Atlas-3 PLT/Igloo	A04459 NASA MSFC					
		1994-073B	CRISTA-SPAS	CRISTA-SPAS	S23341 DLR					
1994-074	1994 Nov 4 0547:00	1994-074A	Resurs-O1	Resurs-O1 No. 3L	S23342 RKA	Zenit-2	-	GIK-5	LC45/1	NK9422-46
1994-075	1994 Nov 11 0721:58	1994-075A	Progress M-25	Progress 7K-TGM No. 225	S23348 MOM	Soyuz 11A511U	Ya15000-638	GIK-5	LC1	NK9807-46
1994-076	1994 Nov 20 0039:37	1994-076A	Kosmos-2294	Uragan No. 62L	S23396 MOM	Proton-K/DM-2	371-01	GIK-5	LC200/39	NK9501-24
		1994-076B	Kosmos-2295	Uragan No. 63L	S23397 MOM					
		1994-076C	Kosmos-2296	Uragan No. 64L	S23398 MOM					
1994-077	1994 Nov 24 0915:59	1994-077A	Kosmos-2297	Tselina-2	S23404 MO RF	Zenit-2	-	GIK-5	LC45/1	AVMN
1994-078	1994 Nov 29 0254:00	1994-078A	Geo-1K	Geo-1K	S23411 RKA	Tsiklon-3	-	GIK-1	LC32/2	NK9501-24
1994-079	1994 Nov 29 1021	1994-079A	Orion 1	Orion	S23413 Orion	Atlas IIA	AC-110	CC	LC36A	Wire

1994-080	1994 Nov 29 1702	1994-080A	DFH-3	DFH-3	S23415	Chinasat	Chang Zheng 3A	CZ3A-2 (36)	XSC	LC2	WSL
1994-F04	1994 Dec 1 2257:51	1994-F04	PAS 3	Panamsat K2	F01130	Panamsat	Ariane 42P	V70	CSG	ELA2	CNES32
1994-081	1994 Dec 14 1421:00	1994-081A	Molniya-1T	Molniya-1T	S23420	MOM	Molniya 8K78M	-	GIK-1	LC43/4	NK9501-24
1994-082	1994 Dec 16 1200:00	1994-082A	Luch	Al'tair No. 13L	S23426	MOM	Proton-K/DM-2	373-02	GIK-5	LC81/23	NK9501-24
1994-083	1994 Dec 20 0511:01	1994-083A	Kosmos-2298	Strela-2	S23431	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9501-24
1994-084	1994 Dec 22 2219	1994-084A	DSP F17	DSP 17	S23435	USAF	Titan 402A/IUS	K-14 (45D-3)	CC	LC40	Wire
1994-085	1994 Dec 26 0301:16	1994-085A	RS-15 Radio-ROSTO	Radio-ROSTO	S23439	RKA	Rokot	No. 4L	GIK-5	LC175/59	AVMN
1994-086	1994 Dec 26 2226:58	1994-086A	Kosmos-2299	Strela-3	S23441	MO RF	Tsiklon-3	-	GIK-1	LC32/2?	NK9501-24
		1994-086B	Kosmos-2300	Strela-3	S23442	MO RF					
		1994-086C	Kosmos-2301	Strela-3	S23443	MO RF					
		1994-086D	Kosmos-2302	Strela-3	S23444	MO RF					
		1994-086E	Kosmos-2303	Strela-3	S23445	MO RF					
		1994-086F	Kosmos-2304	Strela-3	S23446	MO RF					
1994-087	1994 Dec 28 1131:00	1994-087A	Raduga	Gran' No. 43L	S23448	MOM	Proton-K/DM-2	366-01	GIK-5	LC81/23	NK9501-24
1994-088	1994 Dec 29 1130:00	1994-088A	Kosmos-2305	Neman	S23453	MOM	Soyuz 11A511U	-	GIK-5	LC31	AVMN
1994-089	1994 Dec 30 1002	1994-089A	NOAA 14	NOAA 14	S23455	NOAA	Atlas E	11E	V	SLC3W	Wire
1995-001	1995 Jan 10 0618	1995-001A	Intelsat 704	Intelsat 704	S23461	Intelsat	Atlas IIAS	AC-113	CC	LC36B	Wire
1995-001	1995 Jan 15 1345	1995-U01	EXPRESS	EXPRESS	A04472	DARA	Mu-3S-II	M-3S2-8	KASC	M1	WSL
		1995-U01	EXPRESS RV	EXPRESS RV	A04473	DARA					
1995-002	1995 Jan 24 0354:22	1995-002A	Tsikada	Tsikada	S23463	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9501-24
		1995-002B	Astrid	Astrid	S23464	SSC					
		1995-002C	FAISAT	FAISAT	S23465	FAI					
1995-F01	1995 Jan 25 2240	1995-F01	Apstar 2	Apstar 2	F01134	APT	Chang Zheng 2E	CZ2E-5 (37)	XSC	LC2	WSL
1995-003	1995 Jan 29 0125	1995-003A	UHF F/O F4	UFO F4 EHF	S23467	HCI	Atlas II	AC-112	CC	LC36A	Wire
1995-004	1995 Feb 3 0522:04	1995-004A	Discovery	Discovery	S23469	NASA JSC	Space Shuttle	STS-63	MPL2, KSC	LC39B	STSJSC
		1995-004	Spacehab SH-03	Spacehab	A04477	Spacehab					
		1995-004B	Spartan-204	Spartan-204	S23470	NRL					
		1995-004	CGP/ODERACS	HH-M	A04479	NASA GSFC					
		1995-004C	ODERACS 2A	ODERACS	S23471	NASA JSC					
		1995-004D	ODERACS 2B	ODERACS	S23472	NASA JSC					
		1995-004E	ODERACS 2C	ODERACS	S23473	NASA JSC					
		1995-004F	ODERACS 2D	ODERACS	S23474	NASA JSC					
		1995-004G	ODERACS 2E	ODERACS	S23475	NASA JSC					
		1995-004	ODERACS 2F	ODERACS	A04474	NASA JSC					
1995-005	1995 Feb 15 1648:28	1995-005A	Progress M-26	Progress 7K-TGM No. 226	S23477	MOM	Soyuz 11A511U	Ya15000-641	GIK-5	LC1	NK9807-46
1995-006	1995 Feb 16 1739:59	1995-006A	Foton	Foton No. 10	S23497	MOM	Soyuz 11A511U	-	GIK-1	LC43/4?	NK9721-34
1995-007	1995 Mar 2 0638:13	1995-007A	Endeavour	OV-105	S23500	NASA JSC	Space Shuttle	STS-67	MPL1, KSC	LC39A	STSJSC
		1995-007	ASTRO-2 Fwd	ASTRO-2 PLT + Igloo	A04483	NASA MSFC					
		1995-007	ASTRO-2 Aft	ASTRO-2 PLT	A04484	NASA MSFC					
		1995-007	EDO	EDO	A04486	NASA JSC					
1995-008	1995 Mar 2 1300:00	1995-008A	Kosmos-2306	Romb	S23501	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9505-47
		1995-008G	Kosmos-2306 SS 1	ESO	S24781	MO SSSR					
		1995-008H	Kosmos-2306 SS 2	ESO	S24782	MO SSSR					
		1995-008J	Kosmos-2306 SS 3	ESO	S24783	MO SSSR					
		1995-008K	Kosmos-2306 SS 4	ESO	S24784	MO SSSR					
		1995-008L	Kosmos-2306 SS 5	ESO	S24785	MO SSSR					
		1995-008M	Kosmos-2306 SS 6	ESO	S24789	MO SSSR					
		1995-008N	Kosmos-2306 SS 7	ESO	S26584	MO SSSR					
		1995-008P	Kosmos-2306 SS 8	ESO	S26585	MO SSSR					
		1995-008Q	Kosmos-2306 SS 9	ESO	S26586	MO SSSR					
		1995-008R	Kosmos-2306 SS 10	ESO	S26587	MO SSSR					
		1995-008S	Kosmos-2306 SS 11	ESO	S26588	MO SSSR					
		1995-008T	Kosmos-2306 SS 12	ESO	S26589	MO SSSR					
		1995-008U	Kosmos-2306 SS 13	ESO	S26592	MO SSSR					
		1995-008V	Kosmos-2306 SS 14	ESO	S26593	MO SSSR					
		1995-008W	Kosmos-2306 SS 15	ESO	S26594	MO SSSR					
		1995-008X	Kosmos-2306 SS 16	ESO	S26595	MO SSSR					
		1995-008Y	Kosmos-2306 SS 17	ESO	S26596	MO SSSR					
		1995-008Z	Kosmos-2306 SS 18	ESO	S26597	MO SSSR					
		1995-008AA	Kosmos-2306 SS 19	ESO	S26598	MO SSSR					
		1995-008	Kosmos-2306 SS 20	ESO	A04500	MO SSSR					
		1995-008	Kosmos-2306 SS 21	ESO	A04501	MO SSSR					
		1995-008	Kosmos-2306 SS 22	ESO	A04502	MO SSSR					
		1995-008	Kosmos-2306 SS 23	ESO	A04503	MO SSSR					
		1995-008	Kosmos-2306 SS 24	ESO	A04504	MO SSSR					
1995-009	1995 Mar 7 0923:44	1995-009A	Kosmos-2307	Uragan No. 65L	S23511	MOM	Proton-K/DM-2	370-02	GIK-5	LC200/39	NK9505-47
		1995-009B	Kosmos-2308	Uragan No. 66L	S23512	MOM					
		1995-009C	Kosmos-2309	Uragan No. 67L	S23513	MOM					
1995-010	1995 Mar 14 0611:34	1995-010A	Soyuz TM-21	Soyuz 7K-STM No. 70	S23519	MOM	Soyuz 11A511U2	-	GIK-5	LC1	AVMN
1995-011	1995 Mar 18 0801	1995-011A	SFU	SFU	S23521	NASDA	H-II	H-II-3F	TNSC	Y	NK9506-46
		1995-011B	Himawari-5	GMS-5	S23522	NASDA					
1995-012	1995 Mar 22 0409:03	1995-012A	Kosmos-2310	Parus	S23526	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9910-34
1995-013	1995 Mar 22 0618	1995-013A	Intelsat 705	Intelsat 705	S23528	Intelsat	Atlas IIAS	AC-115	CC	LC36B	Wire
1995-014	1995 Mar 22 1644:59	1995-014A	Kosmos-2311	Kobal't	S23530	MOM	Soyuz 11A511U	-	GIK-1	LC43/3	AVMN
		1995-014	Spuskaemiy Kapsula	SpK	A04510	MOM					
		1995-014	Spuskaemiy Kapsula	SpK	A04514	MOM					
1995-015	1995 Mar 24 1405	1995-015A	DMSP 24547	DMSP S-13	S23533	USAF	Atlas E	45E	V	SLC3W	Wire
1995-F02	1995 Mar 28 1000	1995-F02	TECHSAT-1	Gurwin-1	F01138	AMSAT-IL	Start	-	GNIIP	LC158	NK9507-24
		1995-F02	ENB	ENB UNAMSAT-1	F01139	UNAM/SAI					
		1995-F02	EKA-2	EKA-2	F01140	MO RF					
1995-016	1995 Mar 28 2314:19	1995-016B	Hot Bird 1	Eutelsat HB1	S23537	Eutelsat	Ariane 44LP	V71	CSG	ELA2	CNES32
		1995-016A	Brasilsat B2	Brasilsat B2	S23536	Telebras					

1995-017	1995 Apr 3 1348	1995-017A 1995-017B 1995-017C	Orbcomm F1 Orbcomm F2 OrbView-1	Orbcomm FM1 Orbcomm FM2 Microlab 1	S23545 Orbcomm S23546 Orbcomm S23547 Orbimage	Pegasus H	F8	L-1011,V	RW30 Wire
1995-018	1995 Apr 5 1116	1995-018A	'Ofeq-3	S23549 ISA	Shaviyt 1	3	PALB	WSL	
1995-019	1995 Apr 7 2347	1995-019A	AMSC 1	S23553 AMSC	Atlas IIA	AC-114	CC	LC36A	Wire
1995-020	1995 Apr 9 1934:12	1995-020A 1986-017JE	Progress M-27 GFZ-1	S23555 MOM S23558 GFZ	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46
1995-021	1995 Apr 21 0144:02	1995-021A	ERS-2	S23560 ESA	Ariane 40	V72	CSG	ELA2	CNES32
1995-022	1995 May 14 1345:00	1995-022A	USA 110	S23567 NRO/CIA	Titan 401A/Centaur	K-23 (45E-8)	CC	LC40	Wire
1995-023	1995 May 17 0634:00	1995-023A	Intelsat 706	S23571 Intelsat	Ariane 44LP	V73	CSG	ELA2	CNES32
1995-024	1995 May 20 0333:22	1995-024A	Spektr	S23579 MOM	Proton-K	378-02	GIK-5	LC81/23	NK9510-30
1995-025	1995 May 23 0552:02	1995-025A	GOES 9	S23581 NOAA	Atlas I	AC-77	CC	LC36B	Wire
1995-026	1995 May 24 2010:09	1995-026A	Kosmos-2312	S23584 MOM	Molniya 8K78M	AC-77	GIK-1	LC16/2	NK9715-48
1995-027	1995 May 31 1527:01	1995-027A	UFO 5	S23589 USN	Atlas II	AC-116	CC	LC36A	Wire
1995-028	1995 Jun 8 0443:00	1995-028A	Kosmos-2313	S23596 MO RF	Tsiklon-2	-	GIK-5	AVMN	
1995-029	1995 Jun 10 0024:00	1995-029A	Kosmos-2313	S23598 HCl	Ariane 42P	V74	CSG	ELA2	CNES32
1995-F03	1995 Jun 22 1958	1995-F03	STEP M3	F01141 USAF STP	Pegasus XL	F9	L-1011,V	RW30 Wire	
1995-030	1995 Jun 27 1932:18	1995-030A	Atlantis	S23600 NASA JSC	Space Shuttle	STS-71	MLP3,KSC	LC39A	STJSJC
1995-031	1995 Jun 28 1825:00	1995-031A	Spacelab-Mir LM	A04521 NASA JSC	Soyuz 11A511U	-	GIK-1	LC43/3	AVMN
1995-032	1995 Jul 5 0309:03	1995-032A	Kosmos-2314	S23601 MOM	-	-	-	-	-
1995-033	1995 Jul 7 1623:34	1995-033A	Spuskaemiy Kapsula	A04523 MOM	Kosmos 11K65M	-	GIK-1	LC132/1	AVMN
		1995-033B	Spuskaemiy Kapsula	A04530 MOM	Ariane 40	V75	CSG	ELA2	CNES32
		1995-033C	Kosmos-2315	S23603 MO RF	-	-	-	-	-
1995-034	1995 Jul 10 1238:00	1995-034A	Helios 1A	S23605 CNES/DGA	Titan 401A/Centaur	K-19 (45E-5)	CC	LC41	Rigg
1995-035	1995 Jul 13 1341:55	1995-035A	CERISE	S23606 CNES/DGA	Space Shuttle	STS-70	MLP2,KSC	LC39B	STJSJC
		1995-035B	UPM/SAT 1	S23607 UPM	-	-	-	-	-
		1995-035C	USA 112	S23609 USAF/NSA	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46
1995-036	1995 Jul 20 0304:41	1995-036A	Discovery	S23612 NASA JSC	Proton-K/DM-2	374-01	GIK-5	LC200/39	NK9515-28
1995-037	1995 Jul 24 1552:10	1995-037A	TDRS 7	S23613 NASA GSFC	-	-	-	-	-
		1995-037B	Progress M-28	S23617 MOM	-	-	-	-	-
		1995-037C	Kosmos-2316	S23620 MOM	-	-	-	-	-
1995-038	1995 Jul 31 2330:00	1995-038A	Kosmos-2317	S23621 MOM	Atlas IIA	AC-118	CC	LC36A	Rigg
1995-039	1995 Aug 2 2359:11	1995-039A	Uragan No. 80L	S23622 MOM	Molniya 8K78M	N15000-294 10M1	GIK-1	LC43/3	NK9516-38
		1995-039P	Uragan No. 81L	S23628 USAF	-	-	-	-	-
		1995-040A	Kosmos-2318	S23632 MOM	-	-	-	-	-
		1995-041A	USA 113	S23646 Czech	Ariane 42L	V76	CSG	ELA2	AWST950807-17
		1995-042A	Interbol-1	S23636 Panamsat	Delta 7925	D228	CC	LC17B	Rigg
		1995-043A	Magion-4	S23639 Korea Tel	Molniya 8K78M	PVB77031-674	GIK-1	LC43/3	NK9815-26
		1995-044A	PAS 4	S23642 MOM	LLV-1	DLV	V	SLC6	AWST950821-18
		1995-045A	Panamsat K3	S23649 JSAT	Atlas IIAS	AC-117	CC	LC36B	Wire
		1995-046A	Mugunghwa	S23651 NTT	Ariane 44P	V77	CSG	ELA2	CNES32
		1995-047A	Molniya-3	S23653 MOM	Proton-K/DM-2	369-02	GIK-5	LC200/39	NK9518-35
		1995-048A	Gemstar DSS-1	S23657 NKAU	Tsiklon-3	-	GIK-1	-	NK9518-36
		1995-049A	Vitasat 1	A04532 FACH	-	-	-	-	-
		1995-050A	JCSAT 3	S23665 MOM	Soyuz 11A511U2	-	GIK-5	LC1	AVMN
		1995-051A	N-STAR a	S23667 NASA JSC	Space Shuttle	STS-69	MLP1,KSC	LC39A	STJSJC
		1995-052A	Kosmos-2319	S23669 SII	-	-	-	-	-
		1995-053A	Kosmos-2320	S23668 NASA GSFC	-	-	-	-	-
		1995-054A	Geizer No. 20L	A04537 NASA GSFC	-	-	-	-	-
		1995-055A	Okean-Ol No. 8 (NKhm 10)	A04538 NASA GSFC	-	-	-	-	-
		1995-056A	Fasat-Alfa	S23670 AT&T	Ariane 42L	V78	CSG	ELA2	CNES32
		1995-057A	Soyuz TM-22	S23672 MOM	Soyuz 11A511U	-	GIK-1	LC43/4	AVMN
		1995-058A	Endeavour	S23674 MOM	Soyuz 11A511U	-	GIK-5	LC31	AVMN
		1995-059A	Wake Shield Facility	S23676 MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9910-34
		1995-060A	Spacelab Long Module	S23678 MOM	Soyuz 11A511U	V15000-645	GIK-5	LC1	NK9807-46
		1995-061A	EDO	S23680 MOM	Proton-K/DM-2	386-01	GIK-5	LC81/23	NK9521-36
		1995-062A	UFO F6	S23686 SES	Ariane 42L	V79	CSG	ELA2	CNES32
		1995-063A	Meteor SM	S23688 NASA JSC	Space Shuttle	STS-73	MLP3,KSC	LC39B	STJSJC
		1995-064A	Meteor RV	A04548 NASA MSFC	-	-	-	-	-
		1995-065A	Kosmos-2322	A04549 NASA JSC	-	-	-	-	-
		1995-066A	Radarsat	S23696 USN	Atlas II	AC-119	CC	LC36A	Rigg
		1995-067A	SURFSAT	F01145 CTA	Conestoga 1620	F1	WI	LA0A	Wire
		1995-068A	Milstar DFS 2	F01146 EER	-	-	-	-	-
		1995-069A	Atlantis	S23704 MO RF	Zenit-2	-	GIK-5	LC45/1	AVMN
		1995-070A	Stikovochniy Otsek	S23710 CSA	Delta 7920-10	D229	V	SLC2W	Rigg
		1995-071A	ISO	S23711 NASA/JPL	-	-	-	-	-
		1995-072A	Gals 2	S23712 USAF	Titan 401A/Centaur	K-211 (45E-7)	CC	LC40	Rigg
		1995-073A	Gals No. 12L	S23714 NASA JSC	Space Shuttle	STS-74	MLP2,KSC	LC39A	STJSJC
		1995-074A	Asiasat 2	A04553 RKA	-	-	-	-	-
		1995-075A	SOHO	S23715 ESA	Ariane 44P	V80	CSG	ELA2	CNES32
		1995-076A	USA 116	S23717 MOM	Proton-K/DM-2	384-01	GIK-5	LC200/39	NK9523-59
		1995-077A	Insat 2C	S23723 Asiasat	Chang Zheng 2E	CZ2E-6 (38)	XSC	LC2	AWST951204-25
		1995-078A	Telecom 2C	S23726 ESA	Atlas IIAS	AC-121	CC	LC36B	Wire
		1995-079A	Kosmos-2323	S23728 NRO/CIA	Titan 404A	K-15 (45J-3)	V	SLC4E	Rigg
		1995-080A	Kosmos-2324	S23731 ISRO	Ariane 44L	V81	CSG	ELA2	CNES32
		1995-081A	Kosmos-2325	S23730 France Tel	-	-	-	-	-
		1995-082A	Galaxy 3R	S23734 USAF	Proton-K/DM-2	378-01	GIK-5	LC200/39	NK9525-30
		1995-083A	Progress M-30	S23736 MOM	-	-	-	-	-
		1995-084A	Progress M-30	S23741 HCG	Atlas IIA	AC-120	CC	LC36A	Wire
		1995-085A	Progress M-30	S23744 MOM	Soyuz 11A511U	647	GIK-5	LC1	NK9807-46



1995-071	1995 Dec 20 0052:14	1995-071A	Kosmos-2326	US-P	S23748	MO RF	Tsiklon-2	-	GIK-5	-	AVMN
1995-072	1995 Dec 28 0645:18	1995-072A	IRS-1C	IRS-1C	S23751	ISRO	Molniya 8K78M	-	GIK-5	LC31	AVMN
		1995-072B	Skipper	Skipper	S23752	BMDO					
1995-073	1995 Dec 28 1150	1995-073A	Echostar 1	Echostar 1	S23754	TCI	Chang Zheng 2E	CZ2E-7 (39)	XSC	LC2	WSL
1995-074	1995 Dec 30 1348:00	1995-074A	Rossi X-ray Timing Explorer	XTE	S23757	NASA GSFC	Delta 7920-10	D230	CC	LC17A	Wire
1996-001	1996 Jan 11 0941:00	1996-001A	Endeavour	OV-105	S23762	NASA JSC	Space Shuttle	STS-72	MLP1, KSC	LC39B	STSJSC
		1996-001B	OAST-Flyer	Spartan 206	S23763	NASA GSFC					
		1996-001	SLA-1/GAS	SLA-1/GAS	A04565	NASA GSFC					
1996-002	1996 Jan 12 2310:00	1996-002B	Measat 1	HS376 Measat 1	S23765	Binariang	Ariane 44L	V82	CSG	ELA2	CNES32
		1996-002A	PAS 3R	Panamsat K4	S23764	Panamsat					
1996-003	1996 Jan 14 1110	1996-003A	Koreasat 2	Koreasat 2	S23768	Korea Tel	Delta 7925	D231	CC	LC17B	Wire
1996-004	1996 Jan 16 1533:45	1996-004A	Kosmos-2327	Parus	S23773	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9602-23
1996-005	1996 Jan 25 0956:00	1996-005A	Gorizont	Gorizont No. 43L	S23775	MOM	Proton-K/DM-2	374-02	GIK-5	LC200/39	NK9602-24
1996-006	1996 Feb 1 0115:01	1996-006A	Palapa C1	Palapa C1	S23779	Satelindo	Atlas IAS	AC-126	CC	LC36B	Wire
1996-007	1996 Feb 5 0719:38	1996-007A	N-Star b	N-Star b	S23781	NTT	Ariane 44P	V83	CSG	ELA2	CNES32
1996-F01	1996 Feb 14 1901	1996-F01	Intelsat 708	Intelsat 708	F01151	Intelsat	Chang Zheng 3B	CZ3B-1 (40)	XSC	LC2	AWST960219-25
1996-008	1996 Feb 17 2043:27	1996-008A	NEAR	NEAR	S23784	NASA GSFC	Delta 7925-8	D232	CC	LC17B	Wire
1996-009	1996 Feb 19 0058:25	1996-009A	Gonets-D1	Gonets-D1 No. 1	S23787	RKA	Tsiklon-3	-	GIK-1	-	NK9701-40
		1996-009B	Gonets-D1	Gonets-D1 No. 2	S23788	RKA					
		1996-009C	Gonets-D1	Gonets-D1 No. 3	S23789	RKA					
		1996-009D	Kosmos-2328	Strela-3	S23790	MO RF					
		1996-009E	Kosmos-2329	Strela-3	S23791	MO RF					
		1996-009F	Kosmos-2330	Strela-3	S23792	MO RF					
1996-010	1996 Feb 19 0819:00	1996-010A	Raduga	Gran' No. 44L	S23794	MOM	Proton-K/DM-2	383-02	GIK-5	LC200/39	NK9604-45
1996-011	1996 Feb 21 1234:05	1996-011A	Soyuz TM-23	Soyuz 7K-STM No. 72	S23798	MOM	Soyuz 11A511U	651	GIK-5	LC1	KIAM
1996-012	1996 Feb 22 2018:00	1996-012A	Columbia	OV-102	S23801	NASA JSC	Space Shuttle	STS-75	MLP3, KSC	LC39B	STSJSC
		1996-012	TSS-1R Deployer	TSS-1R Deployer	A04569	NASA MSFC					
		1996-012B	TSS-1R	TSS-1R	S23805	ASI					
		1996-012	TSS-1R MPRESS	TSS-1R MPRESS	A04570	NASA MSFC					
		1996-012	USMP-3 Fwd	USMP-3	A04571	NASA MSFC					
		1996-012	USMP-3 Aft	USMP-3	A04572	NASA MSFC					
		1996-012	EDO	EDO	A04573	NASA JSC					
1996-013	1996 Feb 24 1124:00	1996-013A	Polar	Polar	S23802	NASA GSFC	Delta 7925-10	D233	V	SLC2W	Rigg
1996-014	1996 Mar 9 0153	1996-014A	REX II	REX II	S23814	USAF STP	Pegasus XL	F10	L-1011, V	RW30	Wire
1996-015	1996 Mar 14 0711:01	1996-015A	Intelsat 707	Intelsat 707	S23816	Intelsat	Ariane 44LP	V84	CSG	ELA2	CNES32
1996-016	1996 Mar 14 1740:00	1996-016A	Kosmos-2331	Kobal't	S23818	MOM	Soyuz 11A511U	-	GIK-1	LC43/4	NK9701-40
		1996-016	Spuskaemiy Kapsula	SpK	A04588	MOM					
		1996-016	Spuskaemiy Kapsula	SpK	A04597	MOM					
1996-017	1996 Mar 21 0453	1996-017A	IRS-P3	IRS-P3	S23827	ISRO	PSLV	PSLV-D3	SHAR	PSLV	SN960325-03
1996-018	1996 Mar 22 0813:04	1996-018A	Atlantis	OV-104	S23831	NASA JSC	Space Shuttle	STS-76	MLP2, KSC	LC39B	STSJSC
		1996-018	Spacehab-SM	Spacehab	A04580	NASA JSC					
1996-019	1996 Mar 28 0021:00	1996-019A	Navstar GPS 33	Navstar SVN 33	S23833	USAF	Delta 7925	D234	CC	LC17B	Rigg
1996-020	1996 Apr 3 2301:01	1996-020A	Inmarsat III F-1	Inmarsat III F-1	S23839	Inmarsat	Atlas IIA	AC-122	CC	LC36A	Wire
1996-021	1996 Apr 8 2309:01	1996-021A	Astra 1F	Astra 1F	S23842	SES	Proton-K/DM-2M	390-01	GIK-5	LC81/23	NK9608-29
1996-022	1996 Apr 20 2236:00	1996-022A	MSAT-1	MSAT-1	S23846	TMI	Ariane 42P	V85	CSG	ELA2	CNES32
1996-023	1996 Apr 23 1148:50	1996-023A	Priroda	TsM-I 77KSI No. 17401	S23848	RKA	Proton-K	385-01	GIK-5	LC81/23	NK9609-13
1996-024	1996 Apr 24 1227:40	1996-024A	MSX	MSX	S23851	BMDO	Delta 7920-10	D235	V	SLC2W	Wire
1996-025	1996 Apr 24 1300:01	1996-025A	Kosmos-2332	Yug	S23853	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9701-40
1996-026	1996 Apr 24 2337:00	1996-026A	USA 118	MERCURY 2	S23855	USAF/NSA	Titan 401A/Centaur	K-16 (45E-4)	CC	LC41	Rigg
1996-027	1996 Apr 30 0431:01	1996-027A	BeppoSAX	SAX	S23857	ASI	Atlas I	AC-78	CC	LC36B	Wire
1996-028	1996 May 5 0704:18	1996-028A	Progress M-31	Progress 7K-TGM No. 231	S23860	MOM	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46
1996-029	1996 May 12 2132:00	1996-029D	USA 122	NOSS B-4	S23862	NRO/NRL	Titan 403A	K-22 (45F-11)	V	SLC4E	Rigg
		1996-029A	USA 119	SSU	S23893	NRO/NRL					
		1996-029B	USA 120	SSU	S23907	NRO/NRL					
		1996-029C	USA 121	SSU	S23908	NRO/NRL					
		1996-029E	USA 123	TIPS Ralph	S23936	NRO/NRL					
		1996-029F	USA 124	TIPS Norton	S23937	NRO/NRL					
		1996-029	TLD	TLD	A05013	NRO/NRL					
1996-F02	1996 May 14 0855:00	1996-F02	-	Kometa No. 18	F01154	MOM	Soyuz 11A511U	PVB78051-368	GIK-5	LC31	NK96-10-32
1996-030	1996 May 16 0156:29	1996-030A	Palapa C2	Palapa C2	S23864	PSN	Ariane 44L	V86	CSG	ELA2	CNES32
		1996-030B	AMOS 1	AMOS 1	S23865	IAI/Mabat					
1996-031	1996 May 17 0244	1996-031A	MSTI 3	MSTI 3	S23868	BMDO	Pegasus H	F11	L-1011, V	RW30	Wire
1996-032	1996 May 19 1030:00	1996-032A	Endeavour	OV-105	S23870	NASA JSC	Space Shuttle	STS-77	MLP1, KSC	LC39B	STSJSC
		1996-032	Spacehab 4	Spacehab 4	A04601	Spacehab					
		1996-032B	Spartan 207	Spartan 207	S23871	JPL					
		1996-032C	IAE	Inflatable Antenna Expt.	S23872	JPL					
		1996-032	TEAMS	TEAMS	A04603	NASA GSFC					
		1996-032	GBA-9	GBA	A04604	NASA GSFC					
		1996-032D	PAMS	PAMS	S23876	NASA GSFC					
1996-033	1996 May 24 0109:59	1996-033A	Galaxy 9	Galaxy 9	S23877	HCI	Delta 7925	D236	CC	LC17B	Rigg
1996-034	1996 May 25 0205	1996-034A	Gorizont	Gorizont No. 44L	S23880	MOM	Proton-K/DM-2	379-01	GIK-5	LC200/39	NK9611-38
1996-F03	1996 Jun 4 1234:06	1996-F03	Cluster F3	Cluster F3	F01157	ESA	Ariane 5G	V88 (501)	CSG	ELA3	ESAPR
		1996-F03	Cluster F4	Cluster F4	F01158	ESA					
		1996-F03	Cluster F1	Cluster F1	F01160	ESA					
		1996-F03	Cluster F2	Cluster F2	F01161	ESA					
1996-035	1996 Jun 15 0655:09	1996-035A	Intelsat 709	Intelsat 709	S23915	Intelsat	Ariane 44P	V87	CSG	ELA2	CNES32
1996-036	1996 Jun 20 1449:00	1996-036A	Columbia	OV-102	S23931	NASA JSC	Space Shuttle	STS-78	MLP3, KSC	LC39B	STSJSC
		1996-036	Spacelab LMS	Spacelab Long Module	A04611	NASA MSFC					
		1996-036	EDO	EDO	A04613	NASA JSC					
1996-F04	1996 Jun 20 1845	1996-F04	[Kosmos]	Kobal't	F01163	MOM	Soyuz 11A511U	-	GIK-1	LC16/2	NK96-12
		1996-F04	Spuskaemiy Kapsula	SpK	F01166	MOM					
		1996-F04	Spuskaemiy Kapsula	SpK	F01168	MOM					



1996-037	1996 Jul 2 0748	1996-037A	TOMS-EP	TOMS-EP	S23940 NASA-GSFC	Pegasus XL	F12	L-1011,V	RW30	Wire
1996-038	1996 Jul 3 0031	1996-038A	USA 125	SDS B-4	S23945 NRO/USAF	Titan 405A	K-2 (45H-1)	CC	LC40	Wire
1996-039	1996 Jul 3 1047	1996-039A	Apstar 1A	Apstar 1A	S23943 APT	Chang Zheng 3	C23-10 (41)	XSC	LC1	AWST960708-17
1996-040	1996 Jul 9 2224:55	1996-040B	Turksat 1C	Turksat 1C	S23949 Turk Telecom	Ariane 44L	V89	CSG	ELA2	CNES32
1996-041	1996 Jul 16 0050	1996-041A	Arabsat IIA	Arabsat 2A	S23948 Arabsat	Delta 7925	D237	CC	LC17A	Wire
1996-042	1996 Jul 25 1242	1996-042A	Navstar SVN 40	Navstar SVN 40	S23953 USAF	Atlas II	AC-125	CC	LC36A	Wire
1996-043	1996 Jul 31 2000:06	1996-043A	UFO F7	UHF F/O F7-EHF	S23967 HCI	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46
1996-044	1996 Aug 8 2249:00	1996-044A	Progress M-32	Progress 7K-TGM No. 232	S24071 MOM	Ariane 44L	V90	CSG	ELA2	PR/AE960809
1996-045	1996 Aug 14 2220:59	1996-044B	Italsat F2	Italsat F2	S24208 ASI	Telecom 2D	S24209 France Tel			
1996-046	1996 Aug 17 0153	1996-045A	Telecom 2D	Telecom 2D	S24207 France Tel	Molniya-1T	S24273 MOM	GIK-1	LC43/3	NK9701-40
		1996-046A	Molniya-1T	Molniya-1T	S24277 NASDA	H-II	H-II-4F	TNSC	Y	WWN-NASDA
		1996-046B	Midori	JAS-2	S24278 JARL					
1996-047	1996 Aug 17 1318:03	1996-047A	JAS-2	Soyuz TM-24	S24280 RKA	Soyuz 11A511U	-	GIK-5	LC1	MIR.323
1996-048	1996 Aug 18 1027	1996-048A	Soyuz TM-24	Zhongxing 7	S24282 Chinastat	Chang Zheng 3	C23-11 (42)	XSC	LC1	Wire
1996-049	1996 Aug 21 0947:26	1996-049A	Zhongxing 7	FAST	S24285 NASA-GSFC	Pegasus XL	F13	L-1011,V	RW30	WWN-FAST
1996-050	1996 Aug 29 0522:00	1996-050A	FAST	Victor	S24291 Cordoba	Molniya 8K78M	-	GIK-1	LC43/3	AVMN
		1996-050B	Interbol-2	Microsatellite	S24292 RKA					
		1996-050C	Magion-5	SO-M2 No. 512	S24293 Czech					
1996-051	1996 Sep 4 0901:00	1996-051A	Kosmos-2333	Magion-5	S24297 MO RF	Zenit-2	-	GIK-5	LC45/1	NK9701-40
1996-052	1996 Sep 5 1247:39	1996-052A	Kosmos-2334	Tselina-2	S24304 MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9618-23
		1996-052B	UNAMSAT-B	Parus	S24305 UNAM					
1996-053	1996 Sep 6 1737:39	1996-053A	UNAMSAT-B	Inmarsat III F-2	S24307 INMARSAT	Proton-K/DM-2	375-01	GIK-5	LC81/23	NK9618-26
1996-054	1996 Sep 8 2149	1996-054A	Inmarsat III F-2	GE 1	S24315 GE Americom	Atlas IIA	AC-123	CC	LC36B	Wire
1996-055	1996 Sep 11 0000:59	1996-055A	GE 1	Echostar II	S24313 Echostar	Ariane 42P	V91	CSG	ELA2	
1996-056	1996 Sep 12 0849	1996-056A	Echostar II	Navstar SVN 30	S24320 USAF	Delta 7925	D238	CC	LC17A	Wire
1996-057	1996 Sep 16 0854:49	1996-057A	Navstar SVN 30	Atlantis	S24324 NASA JSC	Space Shuttle	STS-79	MLP1,KSC	LC39A	STSJSC
		1996-057B	OV-104	Spacehab Double Module	A04630 NASA JSC					
1996-058	1996 Sep 26 1750:53	1996-058A	Spacehab Double Module	Ekspress	S24435 AO Inform	Proton-K/DM-2M	379-02	GIK-5	LC200/39	NK9810-25
1996-059	1996 Oct 20 0720	1996-059A	Ekspress	Ekspress No. 12L	S24634 CASC	Chang Zheng 2D	C22D-3 (43)	JQ		Wire
		1996-059B	FSW-2 No. 3	FSW-2 No. 3	A05014 CASC					
		1996-059C	FSW-2 RV	FSW-2 RV	S24640 MOM	Molniya 8K78M	PVB71612-697	GIK-1	LC43/4	NK9701-40
1996-060	1996 Oct 24 1137:00	1996-060A	Molniya-3	Molniya-3 No. 62	A04634 CONAE	Pegasus XL	F14	L-1011,WI	RW04	Wire
1996-061	1996 Nov 4 1708:56	1996-061A	SAC-B	SAC-B	S24645 NASA-GSFC					
		1996-061B	HETE	HETE	S24648 NASA/JPL	Delta 7925	D239	CC	LC17A	Wire
1996-062	1996 Nov 7 1700:49	1996-062A	Mars Global Surveyor	MGS	S24652 Arabsat	Ariane 44L	V92	CSG	ELA2	Wire
1996-063	1996 Nov 13 2240:00	1996-063A	Arabsat IIB	Arabsat 2B	S24653 Binariang					
		1996-063B	Measat 2	Measat 2	A04638 RKA	Proton-K/D-2	392-02	GIK-5	LC200/39	NK9622-25
1996-064	1996 Nov 16 2048:53	1996-064A	Mars-8	M1 No. 520 (Mars-96)	A04640 RKA					
		1996-064B	MAS 1	MAS No. 520/1	A04641 RKA					
		1996-064C	MAS 2	MAS No. 520/2	A04642 RKA					
		1996-064D	Penetrator 1	PN No. 520/4	A04643 RKA					
		1996-064E	Penetrator 2	PN No. 520/5	S24660 NASA JSC	Space Shuttle	STS-80	MLP3,KSC	LC39B	MSFCFLASH
1996-065	1996 Nov 19 1955:47	1996-065A	Columbia	OV-102	S24661 DLR					
		1996-065B	ORFEUS-SPAS	ASTRO-SPAS	S24662 SII					
		1996-065C	Wake Shield Facility	WSP	A04646 NASA JSC					
		1996-065D	EDO	EDO	S24663 RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46
1996-066	1996 Nov 19 2320:38	1996-066A	Progress M-33	Progress 7K-TGM No. 233	S24665 Eutelsat	Atlas IIA	AC-124	CC	LC36A	Wire
1996-067	1996 Nov 21 2047	1996-067A	Hot Bird 2	Eutelsat HB2	A04654 NASA/JPL	Delta 7925	D240	CC	LC17B	Wire
1996-068	1996 Dec 4 0658:07	1996-068A	MPF Cruise Stage	MPF Cruise Stage	S24667 NASA/JPL					
		1996-068B	Sagan Memorial Station	MPF Lander	A04656 NASA/JPL					
		1996-068C	Sojourner	MFEX Rover	S24670 MO RF	Tsiklon-2	-	GIK-5	-	NK96-25-41
1996-069	1996 Dec 11 1200:00	1996-069A	Kosmos-2335	US-P	S24674 Inmarsat	Atlas IIA	AC-129	CC	LC36B	Wire
1996-070	1996 Dec 18 0157	1996-070A	Inmarsat III F3	Inmarsat III F3	S24677 MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9626-30
1996-071	1996 Dec 20 0643:58	1996-071A	Kosmos-2336	Parus	S24680 NRO/USAF	Titan 404A	K-13 (45J-5)	V	SLC4E	Wire
1996-072	1996 Dec 20 1804	1996-072A	USA 129	Improved CRYSTAL 4	S24701 RKA	Soyuz 11A511U	PVB15000-050	GIK-1	LC43/4	NK96-26-34
1996-073	1996 Dec 24 1350:00	1996-073A	Bion No. 11	Bion No. 11	S24711 NASA JSC	Space Shuttle	STS-81	MLP2,KSC	LC39B	MSFCFLASH
1997-001	1997 Jan 12 0927:23	1997-001A	Atlantis	OV-104	A04672 NASA JSC					
		1997-001B	Spacehab Double Module	Spacehab DM	F01173 USAF	Delta 7925	D241	CC	LC17A	Wire
1997-F01	1997 Jan 17 1628	1997-F01	GPS SVN 42	GPS SVN 42	S24713 GE Americom	Ariane 44L	V93	CSG	ELA2	Wire
1997-002	1997 Jan 30 2204:00	1997-002A	GE 2	GE 2	S24714 Nahuelsat					
		1997-002B	Nahuel 1A	Soyuz TM-25	S24717 RKA	Soyuz 11A511U	-	GIK-5	LC1	AVMN
1997-003	1997 Feb 10 1409:30	1997-003A	Soyuz TM-25	Soyuz 7K-TGM No. 74	S24719 NASA JSC	Space Shuttle	STS-82	MLP1,KSC	LC39A	MSFCFLASH
1997-004	1997 Feb 11 0855:17	1997-004A	Discovery	OV-103	A04674 NASA JSC					
		1997-004B	External Airlock	EAL	A04675 NASA JSC					
		1997-004C	SAC	SAC	A04676 NASA JSC					
		1997-004D	ORUC	ORUC	A04677 NASA JSC					
		1997-004E	FSS	FSS	S24720 ISAS	M-V	M-V-1	KASC	M-V	Wire
1997-005	1997 Feb 12 0450	1997-005A	Haruka	MUSES-B	S24728 MO RF	Tsiklon-3	-	GIK-1	-	NK9704-54
1997-006	1997 Feb 14 0347:22	1997-006D	Kosmos-2337	Strela-3	S24729 MO RF					
		1997-006E	Kosmos-2338	Strela-3	S24730 MO RF					
		1997-006F	Kosmos-2339	Strela-3	S24725 RKA					
		1997-006G	Gonets-D1	Gonets-D1 No. 4	S24726 RKA					
		1997-006H	Gonets-D1	Gonets-D1 No. 5	S24727 RKA					
		1997-006I	Gonets-D1	Gonets-D1 No. 6	S24732 JSAT	Atlas IIAS	AC-127	CC	LC36B	Wire
1997-007	1997 Feb 17 0142:02	1997-007A	JCSAT 4	JCSAT 4	S24737 USAF	Titan 402B/IUS	4B-24 (K-24, 45)	CC	LC40	Wire
1997-008	1997 Feb 23 2020	1997-008A	DSP F18	DSP 20	S24742 Intelsat	Ariane 44P	V94	CSG	ELA2	Wire
1997-009	1997 Mar 1 0107:42	1997-009A	Intelsat 801	Intelsat 801	S24744 MO RF	Start-1.2	-	GIK-2	LC5	NK9705-11
1997-010	1997 Mar 4 0200:02	1997-010A	Zeya	Zeya	S24748 TCI	Atlas IIA	AC-128	CC	LC36A	Wire
1997-011	1997 Mar 8 0601	1997-011A	Tempo 2	Tempo 2	S24753 USAF	Titan II SLV	23G-6	V	SLC4W	Wire
1997-012	1997 Apr 4 1647	1997-012A	DMSP 5D-2 F-14	DMSP 5D-2 S-14	S24755 NASA JSC	Space Shuttle	STS-83	MLP3,KSC	LC39A	MSFCFLASH
1997-013	1997 Apr 4 1920:32	1997-013A	Columbia	OV-102						



			1997-051G	Iridium 31	Iridium SV031	S24950	Iridium							
			1997-051B	Iridium 32	Iridium SV032	S24945	Iridium							
			1997-051C	Iridium 33	Iridium SV033	S24946	Iridium							
1997-052	1997 Sep 23	1644:51	1997-052A	Kosmos-2346	Parus	S24953	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9910-34		
			1997-052B	FAISAT-2V	FAISAT-2V	S24954	FAI							
1997-053	1997 Sep 23	2358	1997-053A	Intelsat 803 (NSS 803)	Intelsat 803	S24957	Intelsat	Ariane 42L	V100	CSG	ELA2	Wire		
1997-054	1997 Sep 24	2130:59	1997-054A	Molniya-1T	Molniya-1T	S24960	MO RF	Molniya 8K78M	-	GIK-1	LC43/4	AVMN		
1997-055	1997 Sep 26	0234:19	1997-055A	Atlantis	OV-104	S24964	NASA JSC	Space Shuttle	STS-86	MLP2,KSC	LC39A	Wire		
			1997-055	Spacehab Double Module	Spacehab Double Module	A04749	NASA JSC							
1997-056	1997 Sep 27	0123:36	1997-056A	Iridium 19	Iridium SV019	S24965	Iridium	Delta 7920-10C	D248	V	SLC2W	Wire		
			1997-056E	Iridium 34	Iridium SV034	S24969	Iridium							
			1997-056D	Iridium 35	Iridium SV035	S24968	Iridium							
			1997-056C	Iridium 36	Iridium SV036	S24967	Iridium							
			1997-056B	Iridium 37	Iridium SV037	S24966	Iridium							
1997-057	1997 Sep 29	0447	1997-057A	IRS-1D	IRS-1D	S24971	ISRO	PSLV	PSLV-C1	SHAR	PSLV	Wire		
1997-058	1997 Oct 5	1508:57	1997-058A	Progress M-36	Progress 7K-TGM No. 237	S25002	RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46		
			1997-058C	Spoutnik-40	RS-17	S24958	RKA							
			1997-058D	X-Mir Inspector	Inspector	S25100	DASA							
1997-059	1997 Oct 5	2101	1997-059A	Echostar 3	Echostar 3	S25004	Echostar	Atlas IIAS	AC-135	CC	LC36B	Wire		
1997-060	1997 Oct 9	1759:59	1997-060A	Foton	Foton No. 11	S25006	RKA	Soyuz 11A511U	-	GIK-1	LC43/3	NK9721-34		
			1997-060	Mirka	Mirka	A04762	DLR							
1997-061	1997 Oct 15	0843	1997-061A	Cassini	Cassini	S25008	NASA/JPL	Titan 401B/Centaur	4B-33 (K-33, 45	CC	LC40	Wire		
			1997-061	Huygens	Huygens	A04759	ESA							
1997-062	1997 Oct 16	1913	1997-062A	Apstar 2R	Apstar 2R	S25010	APT	Chang Zheng 3B	CZ3B-3 (48)	XSC	LC2	Wire		
1997-063	1997 Oct 22	1313	1997-063A	STEP M4	STEP M4	S25013	USAF STP	Pegasus XL	F18	L-1011,WI	RW04	Wire		
1997-064	1997 Oct 24	0232	1997-064A	USA 133	LACROSSE 3	S25017	NRO/CIA	Titan 403A	4A-18 (K-18, 45	V	SLC4E	Wire		
1997-065	1997 Oct 25	0046	1997-065A	USA 135	DSCS III B-13	S25019	USAF	Atlas IIA	AC-131	USAF	LC36A	Wire		
			1997-065B	Falcon Gold	Falcon Gold	A04764	USAF							
1997-066	1997 Oct 30	1343	1997-066B	Maqsat-B	Maqsat-B	S25024	ESA	Ariane 5G	V101 (502)	CSG	ELA3	Wire		
			1997-066A	Maqsat-H	Maqsat-H	A04766	ESA							
			1997-066A	TEAMSAT	TEAMSAT	S25023	ESA							
			1997-066C	YES	Young Engineers Satellite	S25025	ESA							
1997-F03	1997 Nov 2	1225:00	1997-F03	SCD-2A	SCD-2A	F01181	INPE	VLS-1	V01	ALCA	VLS	Wire		
1997-067	1997 Nov 6	0030:00	1997-067A	GPS SVN 38	GPS SVN 38	S25030	USAF	Delta 7925	D249	CC	LC17A	Wire		
1997-068	1997 Nov 8	0205	1997-068A	USA 136	TRUMPET 3	S25034	USAF/NSA	Titan 401A/Centaur	4A-17 (K-20, 45	CC	LC41	Wire		
1997-069	1997 Nov 9	0134:26	1997-069E	Iridium 38	Iridium SV038	S25043	Iridium	Delta 7920-10C	D250	V	SLC2W	Wire		
			1997-069D	Iridium 39	Iridium SV039	S25042	Iridium							
			1997-069C	Iridium 40	Iridium SV040	S25041	Iridium							
			1997-069B	Iridium 41	Iridium SV041	S25040	Iridium							
			1997-069A	Iridium 43	Iridium SV043	S25039	Iridium							
1997-070	1997 Nov 12	1700:00	1997-070A	Kupon	K95K	S25045	TsBank	Proton-K/DM-2M	382-01	GIK-5	LC200/39	NK9723-36		
1997-071	1997 Nov 12	2148	1997-071B	Cakrawarta 1	Indostar 1	S25050	Indostar	Ariane 44L	V102	CSG	ELA2	Wire		
			1997-071A	Sirius 2	Sirius 2	S25049	NSAB							
1997-072	1997 Nov 18	1114:59	1997-072A	Resurs F-1M	Resurs F-1M	S25059	RKA	Soyuz 11A511U	-	GIK-1		Wire		
1997-073	1997 Nov 19	1946:00	1997-073A	Columbia	OV-102	S25061	NASA JSC	Space Shuttle	STS-87	MLP1,KSC	LC39B	MSFCFLASH		
			1997-073B	Spartan 201	Spartan 201	S25062	NASA GSFC							
			1997-073	USMP-4 Forward	USMP-4	A04774	NASA MSFC							
			1997-073	USMP-4 Aft	USMP-4	A04775	NASA MSFC							
			1997-073	EDO	EDO	A04776	NASA JSC							
			1997-073	AERCam/Sprint	Sprint	A04788	NASA JSC							
1997-074	1997 Nov 27	2127	1997-074A	TRMM	TRMM	S25063	NASA GSFC	H-II	H-II-6F	TNSC	Y	WWW-NASDA		
			1997-074B	Hikoboshi	ETS-7	S25064	NASDA							
			1997-074E	Orihime	ETS-7 Target	S25424	NASDA							
1997-075	1997 Dec 2	2252	1997-075A	JCSAT 5	JCSAT 5	S25067	JSAT	Ariane 44P	V103	CSG	ELA2	Wire		
			1997-075B	Equator-S	Equator-S	S25068	MPE							
1997-076	1997 Dec 2	2310:37	1997-076A	Astra 1G	Astra 1G	S25071	SES	Proton-K/DM-2M	382-02	GIK-5	LC81/23	NK9725-35		
1997-077	1997 Dec 8	0716	1997-077A	Iridium 42	Iridium SV042	S25077	Iridium	Chang Zheng 2C-III/SD	CZ2C-16 (49)	TYSC	LC1	Wire		
			1997-077B	Iridium 44	Iridium SV044	S25078	Iridium							
1997-078	1997 Dec 8	2352	1997-078A	Galaxy 8i	Galaxy 8-i	S25086	Panamsat	Atlas IIAS	AC-149	CC	LC36B	Wire		
1997-079	1997 Dec 9	0717:20	1997-079A	Kosmos-2347	US-P	S25088	MO RF	Tsikon-2	-	GIK-5	-	Wire		
1997-080	1997 Dec 15	1540:00	1997-080A	Kosmos-2348	Kobal't	S25095	MO RF	Soyuz 11A511U	-	GIK-1		TLE		
			1997-080	Spuskaemiy Kapsula	SpK	A04798	MO RF							
			1997-080	Spuskaemiy Kapsula	SpK	A04821	MO RF							
1997-081	1997 Dec 20	0845:02	1997-081A	Progress M-37	Progress 7K-TGM No 236	S25102	RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46		
1997-082	1997 Dec 20	1316	1997-082A	Iridium 45	Iridium SV045	S25104	Iridium	Delta 7920-10C	D251	V	SLC2W	Wire		
			1997-082B	Iridium 46	Iridium SV046	S25105	Iridium							
			1997-082C	Iridium 47	Iridium SV047	S25106	Iridium							
			1997-082D	Iridium 48	Iridium SV048	S25107	Iridium							
			1997-082E	Iridium 49	Iridium SV049	S25108	Iridium							
1997-083	1997 Dec 22	0016	1997-083A	Intelsat 804	Intelsat 804	S25110	Intelsat	Ariane 42L	V104	CSG	ELA2	Wire		
1997-084	1997 Dec 23	1911:42	1997-084A	Orbcomm A1	Orbcomm FM5	S25112	Orbcomm	Pegasus XL/HAPS	F19	L-1011,WI	RW04	Rosenberg		
			1997-084B	Orbcomm A2	Orbcomm FM6	S25113	Orbcomm							
			1997-084C	Orbcomm A3	Orbcomm FM7	S25114	Orbcomm							
			1997-084D	Orbcomm A4	Orbcomm FM8	S25115	Orbcomm							
			1997-084E	Orbcomm A5	Orbcomm FM9	S25116	Orbcomm							
			1997-084F	Orbcomm A6	Orbcomm FM10	S25117	Orbcomm							
			1997-084G	Orbcomm A7	Orbcomm FM11	S25118	Orbcomm							
			1997-084H	Orbcomm A8	Orbcomm FM12	S25119	Orbcomm							
1997-085	1997 Dec 24	1332:52	1997-085A	EarlyBird	EarlyBird	S25123	EarthWatch	Start-1	-	GIK-2	LC5	Lissov		
1997-086	1997 Dec 24	2319	1997-086A	HGS-1	Asiasat 3	S25126	Asiasat	Proton-K/DM-2M	394-01	GIK-5	LC81/23	NK9726-45		
1998-001	1998 Jan 7	0228:44	1998-001A	Lunar Prospector	LP	S25131	NASA ARC	Athena-2	LM-004	SPFL	SLC46	Wire		
1998-002	1998 Jan 10	0032:01	1998-002A	SkyNet 4D	SkyNet 4D	S25134	UK MOD	Delta 7925-9.5	D252	CC	LC17B	Wire		

1998-F01	1998 Jan 22 1256	1998-F01	'Ofeq-4	'Ofeq-4	F01183 ISA	Shaviyt 1	4	PALB		Wire
1998-003	1998 Jan 23 0248:15	1998-003A	Endeavour	OV-105	S25143 NASA JSC	Space Shuttle	STS-89	MLP3, KSC	LC39A	MSFCFLASH
		1998-003A	Spacehab Double Module	Spacehab Double Module	A04807 NASA JSC					
1998-004	1998 Jan 29 1633:42	1998-004A	Soyuz TM-27	Soyuz 7K-STM No. 76	S25146 RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9902-45
1998-005	1998 Jan 29 1837	1998-005A	CAPRICORN	CAPRICORN	S25148 NRO	Atlas IIA	AC-109	CC	SLC36A	Wire
1998-006	1998 Feb 4 2329	1998-006A	Brasilsat B3	Brasilsat B3	S25152 Embratel	Ariane 44LP	V105	CSG	ELA2	Wire
		1998-006B	Inmarsat 3 F5	Inmarsat 3 F5	S25153 Inmarsat					
1998-007	1998 Feb 10 1320	1998-007D	Celestis-02	CPAC	S25160 Celestis	Taurus 2210	T2 2210	V	576E	Wire
		1998-007B	Orbcomm G1	Orbcomm FM3	S25158 Orbcomm					
		1998-007C	Orbcomm G2	Orbcomm FM4	S25159 Orbcomm					
		1998-007A	GFO	GFO	S25157 USN					
1998-008	1998 Feb 14 1434	1998-008A	Globalstar FM1	Globalstar FM1	S25162 Globalstar	Delta 7420-10C	D253	CC	LC17A	Wire
		1998-008B	Globalstar FM2	Globalstar FM2	S25163 Globalstar					
		1998-008C	Globalstar FM3	Globalstar FM3	S25164 Globalstar					
		1998-008D	Globalstar FM4	Globalstar FM4	S25165 Globalstar					
1998-009	1998 Feb 17 1035:00	1998-009A	Kosmos-2349	Kometa No. 19	S25167 RKA	Soyuz 11A511U	-	GIK-5	LC31	NK9902-45
1998-010	1998 Feb 18 1358:09	1998-010D	Iridium 50	Iridium SV050	S25172 Iridium	Delta 7920-10C	D254	V	SLC2W	Wire
		1998-010A	Iridium 52	Iridium SV052	S25169 Iridium					
		1998-010E	Iridium 53	Iridium SV053	S25173 Iridium					
		1998-010C	Iridium 54	Iridium SV054	S25171 Iridium					
		1998-010B	Iridium 56	Iridium SV056	S25170 Iridium					
1998-011	1998 Feb 21 0755	1998-011A	Kakehashi	COMETS	S25175 NASDA	H-II	H-II-5F	TNSC	Y	WWW-NASDA
1998-012	1998 Feb 26 0707	1998-012A	SNOE	SNOE	S25233 NASA GSFC	Pegasus XL	F20	L-1011,V	RW30	Wire
		1998-012B	T1	BATSAT	S25234 Teledesic					
1998-013	1998 Feb 27 2238	1998-013A	Hot Bird 4	Hot Bird 4	S25237 Eutelsat	Ariane 42P	V106	CSG	ELA2	Wire
1998-014	1998 Feb 28 0021	1998-014A	Intelsat 806 (NSS 806)	Intelsat 806	S25239 Intelsat	Atlas IIAS	AC-151	CC	SLC36B	Wire
1998-015	1998 Mar 14 2245:55	1998-015A	Progress M-38	Progress 7K-TGM No 240	S25256 RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9807-46
1998-016	1998 Mar 16 2132	1998-016A	UHF F/O F8	UHF F/O F8	S25258 USN	Atlas II	AC-132	CC	SLC36A	Wire
1998-017	1998 Mar 24 0146	1998-017A	SPOT-4	SPOT-4	S25260 CNES	Ariane 40	V107	CSG	ELA2	Wire
1998-018	1998 Mar 25 1701:06	1998-018A	Iridium 51	Iridium SV051	S25262 Iridium	Chang Zheng 2C-III/SD	CZ2C-17 (50)	TYSC	LC1	CALT-WWW
		1998-018B	Iridium 61	Iridium SV061	S25263 Iridium					
1998-019	1998 Mar 30 0602:46	1998-019A	Iridium 55	Iridium SV055	S25272 Iridium	Delta 7920-10C	D255	V	SLC2W	Rigg
		1998-019B	Iridium 57	Iridium SV057	S25273 Iridium					
		1998-019C	Iridium 58	Iridium SV058	S25274 Iridium					
		1998-019D	Iridium 59	Iridium SV059	S25275 Iridium					
		1998-019E	Iridium 60	Iridium SV060	S25276 Iridium					
1998-020	1998 Apr 2 0242:39	1998-020A	TRACE	TRACE	S25280 NASA GSFC	Pegasus XL	F21	L-1011,V	RW30	Wire
1998-021	1998 Apr 7 0213:03	1998-021A	Iridium 62	Iridium SV062	S25285 Iridium	Proton-K/17S40	391-02	GIK-5	LC81/23	NK9809-11
		1998-021B	Iridium 63	Iridium SV063	S25286 Iridium					
		1998-021C	Iridium 64	Iridium SV064	S25287 Iridium					
		1998-021D	Iridium 65	Iridium SV065	S25288 Iridium					
		1998-021E	Iridium 66	Iridium SV066	S25289 Iridium					
		1998-021F	Iridium 67	Iridium SV067	S25290 Iridium					
		1998-021G	Iridium 68	Iridium SV068	S25291 Iridium					
1998-022	1998 Apr 17 1819:00	1998-022A	Columbia	OV-102	S25297 NASA JSC	Space Shuttle	STS-90	MLP2, KSC	LC39B	MSFCFLASH
		1998-022A	Neurolab	Spacelab Long Module 2	A04835 NASA MSFC					
		1998-022	EDO	EDO	A04838 NASA JSC					
1998-023	1998 Apr 24 2238:34	1998-023A	Globalstar FM6	Globalstar FM6	S25306 Globalstar	Delta 7420-10C	D256	CC	LC17A	Wire
		1998-023B	Globalstar FM8	Globalstar FM8	S25307 Globalstar					
		1998-023C	Globalstar FM14	Globalstar FM14	S25308 Globalstar					
		1998-023D	Globalstar FM15	Globalstar FM15	S25309 Globalstar					
1998-024	1998 Apr 28 2253	1998-024A	Nilesat 101	Nilesat 101	S25311 Nilesat	Ariane 44P	V108	CSG	ELA2	Wire
		1998-024B	BSAT 1b	BSAT 1b	S25312 BSAT					
1998-025	1998 Apr 29 0436:54	1998-025A	Kosmos-2350	Prognoz	S25315 RVSN	Proton-K/DM-2	384-02	GIK-5	LC200/39	NK9810-25
1998-026	1998 May 2 0916:53	1998-026A	Iridium 69	Iridium SV069	S25319 Iridium	Chang Zheng 2C-III/SD	CZ2C-18 (51)	TYSC	LC1	CALT-WWW
		1998-026B	Iridium 71	Iridium SV071	S25320 Iridium					
1998-027	1998 May 7 0853:22	1998-027A	Kosmos-2351	Oko	S25327 MO RF	Molniya 8K78M	-	GIK-1	LC16/2	NK9811-14
1998-028	1998 May 7 2345:00	1998-028A	Echostar 4	Echostar 4	S25331 Echostar	Proton-K/DM-2M	393-02	GIK-5	LC81/23	NK9811-15
1998-029	1998 May 9 0138:01	1998-029A	USA 139	Adv ORION 2	S25336 NRO/NSA	Titan 401B/Centaur	4B-25 (K-25)	CC	LC40	Wire
1998-030	1998 May 13 1552:04	1998-030A	NOAA 15	NOAA K	S25338 NOAA	Titan II SLV	23G-12	V	SLC4W	Wire
1998-031	1998 May 14 2212:59	1998-031A	Progress M-39	Progress 7K-TGM No 238	S25340 RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9811-03
1998-032	1998 May 17 2116:56	1998-032A	Iridium 70	Iridium SV070	S25342 Iridium	Delta 7920-10C	D257	V	SLC2W	Wire
		1998-032B	Iridium 72	Iridium SV072	S25343 Iridium					
		1998-032C	Iridium 73	Iridium SV073	S25344 Iridium					
		1998-032D	Iridium 74	Iridium SV074	S25345 Iridium					
		1998-032E	Iridium 75	Iridium SV075	S25346 Iridium					
1998-033	1998 May 30 1000:04	1998-033A	Zhongwei 1	Chinastar 1	S25354 China Orient	Chang Zheng 3B	CZ3B-4 (52)	XSC	LC2	CALT-WWW
1998-034	1998 Jun 2 2206:24	1998-034A	Discovery	OV-103	S25356 NASA JSC	Space Shuttle	STS-91	MLP1, KSC	LC39A	MSFCFLASH
		1998-034A	Spacehab	Spacehab FU1	A04851 Spacehab					
		1998-034A	AMS	Alpha Magnetic Spectromet	A04852 CERN					
1998-035	1998 Jun 10 0035	1998-035A	Thor III	Thor 3	S25358 Telenor	Delta 7925-9.5	D258	CC	LC17A	Wire
1998-036	1998 Jun 15 2258:05	1998-036A	Kosmos-2352	Strela-3	S25363 MO RF	Tsiklon-3	-	GIK-1	-	NK9814-08
		1998-036B	Kosmos-2353	Strela-3	S25364 MO RF					
		1998-036C	Kosmos-2354	Strela-3	S25365 MO RF					
		1998-036D	Kosmos-2355	Strela-3	S25366 MO RF					
		1998-036E	Kosmos-2356	Strela-3	S25367 MO RF					
		1998-036F	Kosmos-2357	Strela-3	S25368 MO RF					
1998-037	1998 Jun 18 2248	1998-037A	Intelsat 805	Intelsat 805	S25371 Intelsat	Atlas IIAS	AC-153	CC	SLC36A	Wire
1998-038	1998 Jun 24 1829:58	1998-038A	Kosmos-2358	Kobal't	S25373 MO RF	Soyuz 11A511U	-	GIK-1	LC43/3	NK9814-10
		1998-038	Spuskaemiy Kapsula	SpK	A04862 MO RF					
		1998-038	Spuskaemiy Kapsula	SpK	A04867 MO RF					
1998-039	1998 Jun 25 1400	1998-039A	Kosmos-2359	Neman	S25376 MO RF	Soyuz 11A511U	-	GIK-5	LC31	NK9814-10



1998-040	1998 Jul 1 0048:01	1998-040A	Molniya-3	Molniya-3 No. 61	S25379 MCM	Molniya 8K78M	-	GIK-1	LC43/3	NK9815-26
1998-041	1998 Jul 3 1812	1998-041A	Nozomi	Planet B	S25383 ISAS	M-V	M-V-3	KASC	M-V	Wire
1998-042	1998 Jul 7 0315:00	1998-042A	Tubsat-N	Tubsat-N	S25389 TUB	Shtil'-1	-	K-407, BLA	LP1	NK9815-15
		1998-042B	Tubsat-N1	Tubsat-N1	S25390 TUB					
		1998-042C	Shtil'-1	Shtil'-1 instr. package	S25391 Makeev					
1998-043	1998 Jul 10 0630:00	1998-043A	Resurs-O1	Resurs-O1 No. 4L	S25394 RKA	Zenit-2	-	GIK-5	LC45/1	NK9815-19
		1998-043B	Fasat-Bravo	Fasat-Bravo	S25395 FACH					
		1998-043C	TM-SAT	TM-SAT	S25396 FACH					
		1998-043D	Gurwin Techsat 1B	Techsat 1B	S25397 Technion					
		1998-043E	WESTPAC	WESTPAC	S25398 WPLTN					
		1998-043F	SAFIR-2	SAFIR-2	S25399 DLR					
1998-044	1998 Jul 18 0920	1998-044A	Sinosat	Sinosat	S25404 Eurasspace	Chang Zheng 3B	CZ3B-5 (53)	XSC	LC2	CALT-WWW
1998-045	1998 Jul 28 0915:00	1998-045A	Kosmos-2360	Tselina-2	S25406 MO RF	Zenit-2	-	GIK-5	LC45/1	NK9815-25
1998-046	1998 Aug 2 1624	1998-046H	Orbcomm B1	Orbcomm FM13	S25420 Orbcomm	Pegasus XL/HAPS	F22	L-1011,WI	RW04	Wire
		1998-046G	Orbcomm B2	Orbcomm FM14	S25419 Orbcomm					
		1998-046F	Orbcomm B3	Orbcomm FM15	S25418 Orbcomm					
		1998-046E	Orbcomm B4	Orbcomm FM16	S25417 Orbcomm					
		1998-046A	Orbcomm B5	Orbcomm FM17	S25413 Orbcomm					
		1998-046B	Orbcomm B6	Orbcomm FM18	S25414 Orbcomm					
		1998-046C	Orbcomm B7	Orbcomm FM19	S25415 Orbcomm					
		1998-046D	Orbcomm B8	Orbcomm FM20	S25416 Orbcomm					
1998-F02	1998 Aug 12 1130:01	1998-F02	USA	MERCURY 3	F01185 USAF/NSA	Titan 401A/Centaur	4A-20 (K-17)	CC	LC41	ISIR980831-3
1998-047	1998 Aug 13 0943:11	1998-047A	Soyuz TM-28	Soyuz 7K-STM No. 77	S25429 RKA	Soyuz 11A511U	-	GIK-5	LC1	NK9902-45
1998-048	1998 Aug 19 2301:46	1998-048A	Iridium 3	Iridium SV078	S25431 Iridium	Chang Zheng 2C-III/SD	CZ2C-19 (54)	TYSC	LC1	CALT-WWW
		1998-048B	Iridium 76	Iridium SV076	S25432 Iridium					
		1998-049A	ST-1	Singapore-Taiwan 1	S25460 Singapore T	Ariane 44P	V109	CSG	ELA2	Wire
1998-F03	1998 Aug 27 0117	1998-F03	Galaxy X	Galaxy 10	F01225 Panamsat	Delta 8930	D259	CC	LC17B	Wire
1998-050	1998 Aug 30 0031:00	1998-050A	Astra 2A	Astra 2A	S25462 SES	Proton-K/DM-2M	383-01	GIK-5	LC81/23	NK9817-28
1998-F04	1998 Aug 31 0307:00	1998-F04	Kwangmyongsong 1	-	F01187 CMIK	Taepodong 1	-	MUSU	-	NYT980901-1
1998-051	1998 Sep 8 2113	1998-051E	Iridium 77	Iridium SV077	S25471 Iridium	Delta 7920-10C	D260	V	SLC2W	Wire
		1998-051D	Iridium 79	Iridium SV079	S25470 Iridium					
		1998-051C	Iridium 80	Iridium SV080	S25469 Iridium					
		1998-051B	Iridium 81	Iridium SV081	S25468 Iridium					
		1998-051A	Iridium 82	Iridium SV082	S25467 Iridium					
1998-F05	1998 Sep 9 2029:00	1998-F05	Globalstar FM5	Globalstar FM5	F01194 Globalstar	Zenit-2 11K77.05	22D (67047801)	GIK-5	LC45/1	Wire
		1998-F05	Globalstar FM7	Globalstar FM7	F01195 Globalstar					
		1998-F05	Globalstar FM9	Globalstar FM9	F01196 Globalstar					
		1998-F05	Globalstar FM10	Globalstar FM10	F01197 Globalstar					
		1998-F05	Globalstar FM11	Globalstar FM11	F01198 Globalstar					
		1998-F05	Globalstar FM12	Globalstar FM12	F01199 Globalstar					
		1998-F05	Globalstar FM13	Globalstar FM13	F01200 Globalstar					
		1998-F05	Globalstar FM16	Globalstar FM16	F01201 Globalstar					
		1998-F05	Globalstar FM17	Globalstar FM17	F01202 Globalstar					
		1998-F05	Globalstar FM18	Globalstar FM18	F01203 Globalstar					
		1998-F05	Globalstar FM20	Globalstar FM20	F01204 Globalstar					
		1998-F05	Globalstar FM21	Globalstar FM21	F01205 Globalstar					
1998-052	1998 Sep 16 0631	1998-052A	PAS 7	PAS 7	S25473 Panamsat	Ariane 44LP	V110	CSG	ELA2	Wire
1998-053	1998 Sep 23 0506	1998-053A	Orbcomm C1	Orbcomm FM21	S25475 Orbcomm	Pegasus XL/HAPS	F23	L-1011,WI	RW04	Wire
		1998-053B	Orbcomm C2	Orbcomm FM22	S25476 Orbcomm					
		1998-053C	Orbcomm C3	Orbcomm FM23	S25477 Orbcomm					
		1998-053D	Orbcomm C4	Orbcomm FM24	S25478 Orbcomm					
		1998-053E	Orbcomm C5	Orbcomm FM25	S25479 Orbcomm					
		1998-053F	Orbcomm C6	Orbcomm FM26	S25480 Orbcomm					
		1998-053G	Orbcomm C7	Orbcomm FM27	S25481 Orbcomm					
		1998-053H	Orbcomm C8	Orbcomm FM28	S25482 Orbcomm					
1998-054	1998 Sep 28 2341:27	1998-054A	Molniya-1T	Molniya-1T	S25485 MOM	Molniya 8K78M	-	GIK-1	LC43/3	NK9821-10
1998-055	1998 Oct 3 1004:49	1998-055A	STEX	STEX	S25489 NRO	ARPA Taurus	T3 1110	V	576E	Rigg
		1998-055C	ATEX	ATEX	S25615 NRO/NRL					
1998-056	1998 Oct 5 2251	1998-056B	Sirius 3	Sirius 3	S25492 NSAB	Ariane 44L	V111	CSG	ELA2	Wire
		1998-056A	Eutelsat W2	Eutelsat W2	S25491 Eutelsat					
1998-057	1998 Oct 9 2250	1998-057A	Hot Bird 5	Eutelsat HB5	S25495 Eutelsat	Atlas IIA	AC-134	CC	SLC36B	Wire
1998-058	1998 Oct 20 0719	1998-058A	UHF F/O F9	UHF F/O F9	S25501 USN	Atlas IIA	AC-130	CC	SLC36A	Wire
1998-059	1998 Oct 21 1637:21	1998-059A	Maqsat-3	Maqsat-3	S25503 ESA	Ariane 5G	V112 (503)	CSG	ELA3	Wire
1998-060	1998 Oct 23 0002	1998-060A	SCD-2	SCD-2	S25504 INPE	Pegasus H	F24/P-33	L-1011,CC	RW30	Wire
1998-061	1998 Oct 24 1208:00	1998-061B	SEDSAT	SEDSAT	S25509 SEDS	Delta 7326-9.5	D261	CC	SLC17A	Wire
		1998-061A	Deep Space 1	Deep Space 1	S25508 NASA/JPL					
1998-062	1998 Oct 25 0414:57	1998-062A	Progress M-40	Progress 7K-TGM No 239	S25512 RKA	Soyuz 11A511U	660	GIK-5	LC1	NK9823-01
		1998-062C	Spoutnik-41	RS-18	S25533 ACP/RuAF					
1998-063	1998 Oct 28 2215:00	1998-063B	GE 5	GE 5	S25516 GE	Ariane 44L	V113	CSG	ELA2	JCM-P
		1998-063A	Afristar	Afristar	S25515 Worldspace					
1998-064	1998 Oct 29 1919:34	1998-064A	Discovery	OV-103	S25519 NASA JSC	Space Shuttle	STS-95	MLP2, KSC	LC39B	MSFCFLASH
		1998-064A	Spacehab	Spacehab FU1	A04876 Spacehab					
		1998-064C	Spartan 201	Spartan 201	S25521 NASA GSFC					
		1998-064B	PANSAT	PANSAT	S25520 USN PGS					
1998-065	1998 Nov 4 0512:00	1998-065A	PAS 8	PAS 8	S25522 Panamsat	Proton-K/DM-2M	395-02	GIK-5	LC81/23	NK9823-30
1998-066	1998 Nov 6 1337:52	1998-066A	Iridium 2	Iridium SV087	S25527 Iridium	Delta 7920-10C	D262	V	SLC2W	Wire
		1998-066E	Iridium 83	Iridium SV083	S25531 Iridium					
		1998-066D	Iridium 84	Iridium SV084	S25530 Iridium					
		1998-066C	Iridium 85	Iridium SV085	S25529 Iridium					
		1998-066B	Iridium 86	Iridium SV086	S25528 Iridium					
1998-067	1998 Nov 20 0640:00	1998-067A	Zarya	77KM No. 17501	S25544 NASA	Proton-K	395-01	GIK-5	LC81/23	NK9901-02
1998-068	1998 Nov 22 2354	1998-068A	BONUM-1	BONUM-1	S25546 Telenor	Delta 7925-9.5	D263	CC	SLC17B	Wire

1998-069	1998 Dec 4 0835:34	1998-069A 1998-069F 1998-069F 1998-069F 1998-069B 1998-069C	Endeavour Unity PMA-1 PMA-2 SAC-A Mightysat 1	OV-105 Node 1 PMA-1 PMA-2 SAC-A Mightysat 1	S25549 NASA JSC S25575 NASA JSC A04890 NASA JSC A04891 NASA JSC S25550 CONAE S25551 USAF	Space Shuttle	STS-88	MLP3, KSC	LC39A	MSFCFLASH
1998-070	1998 Dec 6 0043	1998-070A	Satmex 5	Satmex 5	S25558 Satmex	Ariane 42L	V114	CSG	ELA2	Wire
1998-071	1998 Dec 6 0057:54	1998-071A	SWAS	SWAS	S25560 NASA GSFC	Pegasus XL	F25	L-1011,V	RW30	Wire
1998-072	1998 Dec 10 1157:07	1998-072A 1998-072B	Nadezhda Astrid-2	Nadezhda Astrid 2	S25567 MO RF S25568 SSC	Kosmos 11K65M	-	GIK-1	LC132/1	Grahn-pc
1998-073	1998 Dec 11 1845:51	1998-073A	Mars Climate Orbiter	MCO	S25571 JPL	Delta 7425-9.5	D264	CC	SLC17A	Wire
1998-074	1998 Dec 19 1139:44	1998-074A 1998-074B	Iridium 11A Iridium 20A	Iridium SV088? Iridium SV089?	S25577 Iridium S25578 Iridium	Chang Zheng 2C-III/SD	C22C-20 (55)	TYSC	LC1	CALT-WWW
1998-075	1998 Dec 22 0108	1998-075A	PAS 6B	PAS 6B	S25585 Satmex	Ariane 42L	V115	CSG	ELA2	Wire
1998-076	1998 Dec 24 2002:19	1998-076A	Kosmos-2361	Parus	S25590 MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9902-17
1998-077	1998 Dec 30 1835:46	1998-077A 1998-077B 1998-077C	Kosmos-2362 Kosmos-2363 Kosmos-2364	Uragan No. 86L Uragan No. 84L Uragan No. 79L	S25593 MOM S25594 MOM S25595 MOM	Proton-K/DM-2	385-02	GIK-5	LC200/39	WWW-CFSCIC
1999-001	1999 Jan 3 2021:10	1999-001A 1999-001 1999-001	Mars Polar Lander Deep Space 2 Microprobe 1 Deep Space 2 Microprobe 2	MPL Mars Microprobe 1 Mars Microprobe 2	S25605 JPL A04907 JPL A04908 JPL	Delta 7425-9.5	D265	CC	SLC17B	Wire
1999-002	1999 Jan 27 0034:02	1999-002A	ROCSAT-1	ROCSAT-1	S25616 NSPO	Athena-1	LM-006	SPFL	SLC46	Wire
1999-003	1999 Feb 7 2104:15	1999-003A 1999-003	Stardust Sample Return Capsule	Stardust SRC	S25618 JPL A04909 JPL	Delta 7426-9.5	D266	CC	SLC17A	Wire
1999-004	1999 Feb 9 0353:59	1999-004A 1999-004B 1999-004C 1999-004D	Globalstar FM36 Globalstar FM23 Globalstar FM38 Globalstar FM40	Globalstar FM36 Globalstar FM23 Globalstar FM38 Globalstar FM40	S25621 Globalstar S25622 Globalstar S25623 Globalstar S25624 Globalstar	Soyuz 11A511U	S15000-058 ST01	GIK-5	LC1	NK9903-32
1999-005	1999 Feb 15 0512:00	1999-005A	Telstar 6	Telstar 6	S25626 Loral Skynet	Proton-K/DM-2M	396-01	GIK-5	LC81/23	NK9904-28
1999-006	1999 Feb 16 0145:26	1999-006A	JCSAT 6	JCSAT 6	S25630 JSAT	Atlas IIAS	AC-152	CC	SLC36A	Wire
1999-007	1999 Feb 20 0418:01	1999-007A	Soyuz TM-29	Soyuz 7K-STM No. 78	S25632 RKA	Soyuz 11A511U	M15000-662	GIK-5	LC1	NK9904-03
1999-008	1999 Feb 23 1029:55	1999-008A 1999-008B 1999-008C	ARGOS Sunsat Orsted	ARGOS Sunsat Orsted	S25634 USAF SMC/TEV S25635 Stellenbosch S25636 DMI	Delta 7920-10	D267	V	SLC2W	Wire
1999-009	1999 Feb 26 2244	1999-009B 1999-009A	Skynet 4E Arabsat 3A	Skynet 4E Arabsat 3A	S25639 UK MoD S25638 Arabsat	Ariane 44L	V116	CSG	ELA2	Wire
1999-010	1999 Feb 28 0400:00	1999-010A	Raduga-1	Globus No. 14	S25642 MO RF	Proton-K/DM-2	387-01	GIK-5	LC81/23	NK9904-38
1999-011	1999 Mar 5 0256	1999-011A	WIRE	WIRE	S25646 NASA GSFC	Pegasus XL	F26/M-22	L-1011,V	RW30	Wire
1999-012	1999 Mar 15 0306:00	1999-012A 1999-012B 1999-012C 1999-012D	Globalstar FM22 Globalstar FM41 Globalstar FM46 Globalstar FM37	Globalstar FM22 Globalstar FM41 Globalstar FM46 Globalstar FM37	S25649 Globalstar S25650 Globalstar S25651 Globalstar S25652 Globalstar	Soyuz 11A511U	-	ST02 GIK-5	LC1	NK9905-21
1999-013	1999 Mar 21 0009:30	1999-013A	Asiasat 3S	Asiasat 3S	S25657 Asiasat	Proton-K/DM-2M	388-01	GIK-5	LC81/23	NK0003-17
1999-014	1999 Mar 28 0129:59	1999-014A	DemoSat	DemoSat	S25661 SeaLaunch	Zenit-3SL	-	ODYSSEY, KLA	Wire	
1999-015	1999 Apr 2 1128:43	1999-015A 1999-015C	Progress M-41 Sputnik-99	Progress 7K-TGM No 241 Sputnik-99	S25664 RKA S25685 AMSAT-F	Soyuz 11A511U	-	GIK-5	LC1	NK9905-01
1999-016	1999 Apr 2 2203	1999-016A	Insat 2E	Insat 2E	S25666 ISRO	Ariane 42P	V117	CSG	ELA2	Wire
1999-017	1999 Apr 9 1701:00	1999-017A	DSP F19 (USA 142)	DSP 18?	S25669 USAF	Titan 402B/IUS	4B-27 (K-32)	CC	LC41	Wire
1999-018	1999 Apr 12 2250	1999-018A	Eutelsat W3	Eutelsat W3	S25673 Eutelsat	Atlas IIAS	AC-154	CC	SLC36A	Wire
1999-019	1999 Apr 15 0046:00	1999-019A 1999-019B 1999-019C 1999-019D	Globalstar FM19 Globalstar FM42 Globalstar FM44 Globalstar FM45	Globalstar FM19 Globalstar FM42 Globalstar FM44 Globalstar FM45	S25676 Globalstar S25677 Globalstar S25678 Globalstar S25679 Globalstar	Soyuz 11A511U	S15000-060 ST03	GIK-5	LC1	NK9906-12
1999-020	1999 Apr 15 1832:00	1999-020A	Landsat 7	Landsat 7	S25682 NASA/GSFC	Delta 7920-10	D268	V	SLC2W	Wire
1999-021	1999 Apr 21 0459:12	1999-021A	UoSAT-12	UoSAT-12	S25693 SSTL	Dnepr	6703542509	GIK-5	LC109/95	NK9906-16
1999-F01	1999 Apr 27 1822:01	1999-F01	Ikonos 1	Ikonos 1	F01208 SpaceIm	Athena-2	LM-005	V	SLC6	Wire
1999-022	1999 Apr 28 2030:00	1999-022A 1999-022B	ABRIXAS Megsat-0	ABRIXAS Megsat-0	S25721 DLR S25722 MegSat	Kosmos 11K65M	65036-413	GTsMP-4	LC107	NK9906-1
1999-023	1999 Apr 30 1630	1999-023A	USA 143	Milstar-2 F1	S25724 USAF	Titan 401B/Centaur	4B-32 (K-26)	CC	LC40	Wire
1999-024	1999 May 5 0100	1999-024A	Orion 3	Orion 3	S25727 Loral Orion	Delta 8930	D269	CC	SLC17B	Wire
1999-025	1999 May 10 0133:00	1999-025A 1999-025B	Feng Yun Shi Jian 5	Feng Yun 1C SJ-5	S25730 CASC S25731 CASC	Chang Zheng 4B	C24B-1 (56)	TYSC	LC1	CGW-WWW
1999-026	1999 May 18 0509:36	1999-026B 1999-026A	MUBLCOM TERRIERS	MUBLCOM TERRIERS	S25736 Orbcomm S25735 NASA GSFC	Pegasus XL/HAPS	F27	L-1011,V	RW30	Wire
1999-027	1999 May 20 2230:00	1999-027A	Nimiq	Telesat DTH-1	S25740 Telesat	Proton-K/DM-2M	396-02	GIK-5	LC81/23	NK9907-42
1999-028	1999 May 22 0936	1999-028A	USA 144	NRO X5?	S25744 NRO	Titan 404B	4B-12	V	SLC4E	Wire
1999-029	1999 May 26 0522	1999-029A 1999-029B 1999-029C	Oceansat KITSAT-3 DLR-TUBSAT-C	IRS-P4 KITSAT-3 DLR-TUBSAT-C	S25756 ISRO S25757 KAIST S25758 DLR	PSLV	PSLV-C2	SHAR	PSLV	Wire
1999-030	1999 May 27 1049:42	1999-030A 1999-030A 1999-030B	Discovery Spacehab Double Module ICC Starshine	OV-103 Spacehab Double Module Integrated Cargo Carrier Starshine	S25760 NASA JSC A04924 NASA JSC A04925 NASA JSC S25769 NASA GSFC	Space Shuttle	STS-96	MLP2, KSC	LC39B	MSFCFLASH
1999-031	1999 Jun 10 1348:43	1999-031A 1999-031B 1999-031C 1999-031D	Globalstar M052 Globalstar M049 Globalstar M025 Globalstar M047	Globalstar M052 Globalstar M049 Globalstar M025 Globalstar M047	S25770 Globalstar S25771 Globalstar S25772 Globalstar S25773 Globalstar	Delta 7420-10C	D270	CC	SLC17B	Wire
1999-032	1999 Jun 11 1715:33	1999-032A 1999-032B	Iridium 14A Iridium 20A	Iridium SV090? Iridium SV091?	S25777 Iridium S25778 Iridium	Chang Zheng 2C-III/SD	C22C-21 (57)	TYSC	LC1	CGW-WWW
1999-033	1999 Jun 18 0149:30	1999-033A	Astra 1H	Astra 1H	S25785 SES	Proton-K/DM-2M	397-02	GIK-5	LC81/23	NK9908-12
1999-034	1999 Jun 20 0215:00	1999-034A	QuikScat	QuikScat	S25789 NASA GSFC	Titan II SLV	23G-7	V	SLC4W	Wire
1999-035	1999 Jun 24 1544:00	1999-035A	FUSE	Far UV Spec. Explorer	S25791 NASA GSFC	Delta 7320-10	D271	CC	SLC17A	Wire

1999-F02	1999 Jul 5	1332:00	1999-F02	Raduga	Gran' No. 45	F01213	MO RF	Proton-K/Briz-M	389-01	GIK-5	LC81/24	NK9909-26	
1999-036	1999 Jul 8	0845:06	1999-036A	Molniya-3	Molniya-3 No. 637	S25847	MOM	Molniya 8K78M	-	GIK-1	LC43/3	NK9909-32	
1999-037	1999 Jul 10	0845:37	1999-037A	Globalstar M032	Globalstar M032	S25851	Globalstar	Delta 7420-10C	D272	CC	SLC17B	Wire	
			1999-037B	Globalstar M030	Globalstar M030	S25852	Globalstar						
			1999-037C	Globalstar M035	Globalstar M035	S25853	Globalstar						
			1999-037D	Globalstar M051	Globalstar M051	S25854	Globalstar						
1999-038	1999 Jul 16	1637:33	1999-038A	Progress M-42	Progress 7K-TGM No 242	S25858	RAKA	Soyuz 11A511U	667	GIK-5	LC1	NK9909-05	
1999-039	1999 Jul 17	0638:00	1999-039A	Okean-O	Okean-O No. 1	S25860	RAKA	Zenit-2	17L	GIK-5	LC45/1	NK9909-34	
1999-040	1999 Jul 23	0431:00	1999-040A	Columbia	OV-102	S25866	NASA JSC	Space Shuttle	STS-93	MLP1, KSC	LC39B	JCM-P	
			1999-040B	Chandra X-ray Observatory	AXAF	S25867	NASA MSFC						
1999-041	1999 Jul 25	0746:03	1999-041A	Globalstar M026	Globalstar M026	S25872	Globalstar	Delta 7420-10C	D273	CC	SLC17A	Wire	
			1999-041B	Globalstar M028	Globalstar M028	S25873	Globalstar						
			1999-041C	Globalstar M043	Globalstar M043	S25874	Globalstar						
			1999-041D	Globalstar M048	Globalstar M048	S25875	Globalstar						
1999-042	1999 Aug 12	2252	1999-042A	Telkom 1	Telkom 1	S25880	PT Telkom	Ariane 42P	V118	CSG	ELA2	Wire	
1999-043	1999 Aug 17	0437:31	1999-043A	Globalstar M024	Globalstar M024	S25883	Globalstar	Delta 7420-10C	D274	CC	SLC17B	Wire	
			1999-043B	Globalstar M027	Globalstar M027	S25884	Globalstar						
			1999-043C	Globalstar M053	Globalstar M053	S25885	Globalstar						
			1999-043D	Globalstar M054	Globalstar M054	S25886	Globalstar						
1999-044	1999 Aug 18	1800	1999-044A	Kosmos-2365	Kobal't	S25889	MO RF	Soyuz 11A511U	-	GIK-1	LC43/3	NK9910-32	
			1999-044	Spuskaemiy Kapsula	SpK	A04938	MO RF						
			1999-044	Spuskaemiy Kapsula	SpK	A04949	MO RF						
1999-045	1999 Aug 26	1202:15	1999-045A	Kosmos-2366	Parus	S25892	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK9910-34	
1999-046	1999 Sep 4	2234	1999-046A	Mugunghwa 3	Koreasat 3	S25894	Korea Tel	Ariane 42P	V120	CSG	ELA2	Wire	
1999-047	1999 Sep 6	1636:00	1999-047A	Yamal 101	Yamal 101	S25896	AO Gazcom	Proton-K/DM-2M	388-02	GIK-5	LC81/23	NK9911-04	
			1999-047B	Yamal 102	Yamal 102	S25897	AO Gazcom						
1999-048	1999 Sep 9	1800:00	1999-048A	Foton	Foton No. 12	S25902	MOM	Soyuz 11A511U	-	GIK-1	LC43/4	NK9911-08	
1999-049	1999 Sep 22	1433:00	1999-049A	Globalstar M033	Globalstar FM33	S25907	Globalstar	Soyuz 11A511U	S15000-061	ST04	GIK-5	LC1	NK9911-15
			1999-049B	Globalstar M050	Globalstar FM50	S25908	Globalstar						
			1999-049C	Globalstar M055	Globalstar FM55	S25909	Globalstar						
			1999-049D	Globalstar M058	Globalstar FM58	S25910	Globalstar						
1999-050	1999 Sep 23	0602	1999-050A	Echostar 5	Echostar 5	S25913	Echostar	Atlas IIAS	AC-155	CC	SLC36A	Wire	
1999-051	1999 Sep 24	0621:08	1999-051A	Ikonos	Ikonos 2	S25919	SpaceIm	Athena-2	LM-007	V	SLC6	Wire	
1999-052	1999 Sep 25	0629	1999-052A	Telstar 7	Telstar 7	S25922	Loral Skynet	Ariane 44LP	V121	CSG	ELA2	Wire	
1999-053	1999 Sep 27	2230:00	1999-053A	LMI 1	LMI 1	S25924	LMI	Proton-K/DM-2M	398-02	GIK-5	LC81/23	NK9911-20	
1999-054	1999 Sep 28	1100:05	1999-054A	Resurs F-1M	Resurs F-1M	S25929	RKA	Soyuz 11A511U	-	GIK-1	LC43/4	NK9911-24	
1999-055	1999 Oct 7	1251:01	1999-055A	GPS SVN 46	GPS SVN 46	S25933	USAF	Delta 7925-9.5	D275	CC	SLC17A	Wire	
1999-056	1999 Oct 10	0328:00	1999-056A	DirectTV-1R	DirectTV-1R	S25937	DirectTV	Zenit-3SL	-	ODYSSEY, KLA		Wire	
1999-057	1999 Oct 14	0315	1999-057A	Zi Yuan 1	Zi Yuan 1	S25940	CASC/INPE	Chang Zheng 4B	CZ4B-2 (58)	TYSC	LC1	Wire	
			1999-057B	SACI 1	SACI 1	S25941	INPE						
1999-058	1999 Oct 18	1322:00	1999-058A	Globalstar M031	Globalstar FM31	S25943	Globalstar	Soyuz 11A511U	M15000-062	ST05	GIK-5	LC1	NK9912-10
			1999-058B	Globalstar M056	Globalstar FM56	S25944	Globalstar						
			1999-058C	Globalstar M057	Globalstar FM57	S25945	Globalstar						
			1999-058D	Globalstar M059	Globalstar FM59	S25946	Globalstar						
1999-059	1999 Oct 19	0622	1999-059A	Orion 2	Orion 2	S25949	Loral Orion	Ariane 44LP	V122	CSG	ELA2	Wire	
1999-F03	1999 Oct 27	1616:00	1999-F03	Ekspress A1	Ekspress A No. 1	F01219	AO Inform	Proton-K/DM-2	386-02	GIK-5	LC200/39	Kosmodrom9911	
1999-060	1999 Nov 13	2254	1999-060A	GE 4	GE 4	S25954	GE Americom	Ariane 44LP	V123	CSG	ELA2	Wire	
1999-F04	1999 Nov 15	0729	1999-F04	MTSAT	MTSAT	F01221	NASDA	H-II-8F	H-II-8F	TNSC	Y	WW-NASDA	
1999-061	1999 Nov 19	2230	1999-061A	Shenzhou	Shenzhou	S25956	CASC	Chang Zheng 2F	CZ2F-1 (59)	JQ	SLS	CALT-WWW	
1999-062	1999 Nov 22	1620:00	1999-062A	Globalstar M029	Globalstar FM29	S25961	Globalstar	Soyuz 11A511U	-	ST06	GIK-5	LC1	NK0003-17
			1999-062B	Globalstar M034	Globalstar FM34	S25962	Globalstar						
			1999-062C	Globalstar M039	Globalstar FM39	S25963	Globalstar						
			1999-062D	Globalstar M061	Globalstar FM61	S25964	Globalstar						
1999-063	1999 Nov 23	0406	1999-063A	UHF F/O F10	UHF F/O F10	S25967	USN	Atlas IIA	AC-136	CC	SLC36B	Wire	
1999-064	1999 Dec 3	1622:46	1999-064A	Helios 1B	Helios 1B	S25977	CNES/DGA	Ariane 40	V124	CSG	ELA2	Wire	
			1999-064B	Clementine	Clementine	S25978	CNES/DGA						
1999-065	1999 Dec 4	1853	1999-065A	Orbcomm D1	Orbcomm FM30	S25980	Orbcomm	Pegasus XL/HAPS	F28	L-1011, WI	RW04	Wire	
			1999-065B	Orbcomm D2	Orbcomm FM31	S25981	Orbcomm						
			1999-065C	Orbcomm D3	Orbcomm FM32	S25982	Orbcomm						
			1999-065D	Orbcomm D4	Orbcomm FM33	S25983	Orbcomm						
			1999-065E	Orbcomm D5	Orbcomm FM34	S25984	Orbcomm						
			1999-065F	Orbcomm D6	Orbcomm FM35	S25985	Orbcomm						
			1999-065G	Orbcomm D7	Orbcomm FM36	S25986	Orbcomm						
1999-066	1999 Dec 10	1432:07	1999-066A	XMM	XMM	S25989	ESA	Ariane 5G	V119 (504)	CSG	ELA3	Wire	
1999-067	1999 Dec 12	1738:01	1999-067A	DMSP 5D-3 F-15	DMSP 5D-3 S-15	S25991	USAF	Titan II SLV	23G-8	V	SLC4W	Wire	
1999-F05	1999 Dec 12	1940	1999-F05	SACI-2	SACI-2	F01223	INPE	VLS-1	V02	ALCA	VLS	AEB-WWW	
1999-068	1999 Dec 18	1857:39	1999-068A	Terra	EOS AM-1	S25994	NASA GSFC	Atlas IIAS	AC-141	V	SLC3E	Wire	
1999-069	1999 Dec 20	0050:00	1999-069A	Discovery	OV-103	S25996	NASA JSC	Space Shuttle	STS-103	MLP2, KSC	LC39B	Wire	
			1999-069	ORUC	ORUC	A04965	NASA JSC						
			1999-069	FSS	FSS	A04966	NASA JSC						
1999-070	1999 Dec 21	0713	1999-070C	Celestis-03	CPAC	A04967	Celestis	Taurus 2110	T4 2110	V	576E	Wire	
			1999-070A	KOMPSAT	KOMPSAT	S26032	KARI						
			1999-070B	ACRIMSAT	ACRIMSAT	S26033	JPL						
1999-071	1999 Dec 22	0050	1999-071A	Galaxy 11	Galaxy 11	S26038	Panamsat	Ariane 44L	V125	CSG	ELA2	Wire	
1999-072	1999 Dec 26	0800	1999-072A	Kosmos-2367	US-P	S26040	MO RF	Tsikhon-2	801 (45082801)	GIK-5	LC90/20	NK0002-42	
1999-073	1999 Dec 27	1912:44	1999-073A	Kosmos-2368	Oko	S26042	MO RF	Molniya 8K78M	-	GIK-1	LC16/2	NK0002-46	
2000-001	2000 Jan 21	0103	2000-001A	USA 148	DSCS III B-8	S26052	USAF	Atlas IIA	AC-138	CC	SLC36A	Wire	
2000-002	2000 Jan 25	0104	2000-002A	Galaxy 10R	Galaxy 10R	S26056	Satmex	Ariane 42L	V126	CSG	ELA2	Wire	
2000-003	2000 Jan 25	1645:05	2000-003A	Zhongxing 22	DFH	S26058	Chinasat	Chang Zheng 3A	CZ3A-4 (60)	XSC	LC2	CALT-PR	
2000-004	2000 Jan 27	0303:06	2000-004A	JAWSAT	JAWSAT	S26061	-	Minotaur	1	V	CLF	ASUSAT-WWW	
			2000-004E	ASUSAT	ASUSAT	S26065	-						
			2000-004C	OPAL	OPAL	S26063	-						



			2000-004B	OCS	OCSE	S26062	-								
			2000-004D	Falconsat	Falconsat I	S26064	-								
			2000-004L	JAK	Artemis	S26093	-								
			2000-004M	STENSAT	STENSAT	S26094	-								
			2000-004H	Picosat 1	MEMS 1	S26080	-								
			2000-004H	Picosat 2	MEMS 2	S26080	-								
			2000-004J	Thelma	Artemis	S26091	-								
			2000-004K	Louise	Artemis	S26092	-								
2000-005	2000 Feb 1	0647:23	2000-005A	Progress M1-1	Progress 7K-TGM No 250	S26067	RAKA	Soyuz 11A511U	A15000-669	GIK-5	LC1		NK0004-14		
2000-006	2000 Feb 3	0926:00	2000-006A	Kosmos-2369	Tselina-2	S26069	MO RF	Zenit-2	45025801	GIK-5	LC45/1		NK0004-17		
2000-007	2000 Feb 3	2339	2000-007A	Hispasat 1C	Hispasat 1C	S26071	Hispasat	Atlas IIAS	AC-158	CC	SLC36B		Wire		
2000-008	2000 Feb 8	2124	2000-008A	Globalstar M060	Globalstar M060	S26081	Globalstar	Delta 7420-10C	D276	CC	SLC17B		Wire		
			2000-008B	Globalstar M062	Globalstar M062	S26082	Globalstar								
			2000-008C	Globalstar M063	Globalstar M063	S26083	Globalstar								
			2000-008D	Globalstar M064	Globalstar M064	S26084	Globalstar								
2000-009	2000 Feb 8	2320:00	2000-009A	Dummy satellite	-	S26086	Lavochkin	Soyuz 11A511U	A15000-079	ST07	GIK-5	LC31	NK0004-24		
			2000-009	IRDIT	Mission 2000	A04971	ESA								
2000-F01	2000 Feb 10	0130	2000-F01	ASTRO E	ASTRO E	F01226	ISAS	M-V	M-V-4	KASC	M-V		Wire		
2000-010	2000 Feb 11	1743:40	2000-010A	Endeavour	OV-105	S26088	NASA JSC	Space Shuttle	STS-99	MPL3, KSC	LC39A		Wire		
			2000-010	SRTM Mast	SRTM Mast	A04978	-								
2000-011	2000 Feb 12	0910:54	2000-011A	Garuda 1	Garuda 1	S26089	ACES	Proton-K/DM-2M	399-02	GIK-5	LC81/23		NK0004-32		
2000-012	2000 Feb 18	0104	2000-012A	Superbird 4	Superbird 4	S26095	SCC	Ariane 44LP	V127	CSG	ELA2		Wire		
2000-013	2000 Mar 12	0407:00	2000-013A	Ekspress 6A	Ekspress A No. 2	S26098	AO Inform	Proton-K/DM-2M	399-01	GIK-5	LC200/39		NK0005-20		
2000-014	2000 Mar 12	0929	2000-014A	MTI	MTI	S26102	DOE	Taurus 1110	T5 1110	V	576E		Wire		
2000-F02	2000 Mar 12	1449:15	2000-F02	ICO F-1	ICO-F1	F01228	ICO	Zenit-3SL	-	ODYSSEY, KLA			Wire		
2000-015	2000 Mar 20	1828:30	2000-015A	Dumsat	-	S26106	Starsem	Soyuz 11A511U	-	ST08	GIK-5	LC31	NK0005-27		
2000-016	2000 Mar 21	2328:19	2000-016B	Insat 3B	Insat 3B	S26108	ISRO	Ariane 5G	V128 (505)	CSG	ELA3		AE-TV		
			2000-016A	Asiastar	Asiastar	S26107	Worldspace								
2000-017	2000 Mar 25	2034:43	2000-017A	IMAGE	IMAGE	S26113	NASA GSFC	Delta 7326-9.5	D277	V	SLC2W		Wire		
2000-018	2000 Apr 4	0501:29	2000-018A	Soyuz TM-30	Soyuz 7K-STM No. 204	S26116	RKA	Soyuz 11A511U	-	GIK-5	LC1		NK0006-08		
2000-019	2000 Apr 17	2106:00	2000-019A	Sesat	Sesat	S26243	Eutelsat	Proton-K/DM-2M	397-01	GIK-5	LC200/39		NK0006-26		
2000-020	2000 Apr 19	0029	2000-020A	Galaxy 4R	Galaxy 4R	S26298	Satmex	Ariane 42L	V129	CSG	ELA2		Wire		
2000-021	2000 Apr 25	2008:02	2000-021A	Progress M1-2	Progress 7K-TGM No 252	S26301	RAKA	Soyuz 11A511U	-	GIK-5	LC1		NK0006-16		
2000-022	2000 May 3	0707	2000-022A	GOES 11	GOES L	S26352	NOAA	Atlas IIA	AC-137	CC	SLC36A		Wire		
2000-023	2000 May 3	1325	2000-023A	Kosmos-2370	Neman	S26354	MO RF	Soyuz 11A511U	A15000-649	GIK-5	LC1		NK0007-32		
2000-024	2000 May 8	1601	2000-024A	DSP F20 (USA 149)	DSP 20	S26356	USAF	Titan 402B/IUS	4B-29	CC	LC40		Wire		
2000-025	2000 May 11	0148	2000-025A	GPS SVN 51	GPS SVN 51	S26360	USAF	Delta 7925-9.5	D278	CC	SLC17A		Wire		
2000-026	2000 May 16	0827:41	2000-026A	Simsat-1	Simsat-1	S26365	Krunichev	Rokot	D268	GIK-1	LC133		Eurockot-WWW		
			2000-026B	Simsat-2	Simsat-2	S26366	Krunichev								
2000-027	2000 May 19	1011:10	2000-027A	Atlantis	OV-104	S26368	NASA JSC	Space Shuttle	STS-101	MPL1, KSC	LC39A		Wire		
			2000-027	Spacehab Double Module	Spacehab Double Module	A04999	NASA JSC								
			2000-027	ICC	Integrated Cargo Carrier	A05000	NASA JSC								
2000-028	2000 May 24	2310	2000-028A	Eutelsat W4	Eutelsat W4	S26369	Eutelsat	Atlas 3A	AC-201	CC	SLC36B		Wire		
			2002-006A	Echostar 7	-	S27378	-								
2000-029	2000 Jun 6	0259:00	2000-029A	Gorizont	Gorizont No. 45L	S26372	MOM	Proton-K/Briz-M	392-01	GIK-5	LC81/24		NK0008-16		
2000-030	2000 Jun 7	1319:30	2000-030A	TSX-5	STEP M5	S26374	USAF STP	Pegasus XL	F29	L-1011, V	RW30		Wire		
2000-031	2000 Jun 24	0028:00	2000-031A	Ekspress 3A	Ekspress A No. 3	S26378	AO Inform	Proton-K/DM-2M	394-02	GIK-5	LC200/39		NK0008-23		
2000-032	2000 Jun 25	1150	2000-032A	Feng Yun 2	FY-2	S26382	CASC	Chang Zheng 3	CZ3-13 (61)	XSC	LC1		CALT-WWW		
2000-033	2000 Jun 28	1037:42	2000-033A	Nadezhda	Nadezhda	S26384	MO RF	Kosmos 11K65M	-	GIK-1	LC132/1		NK0008-25		
			2000-033B	Tsinghua	-	S26385	Tsinghua								
			2000-033C	SNAP	-	S26386	SSTL								
2000-034	2000 Jun 30	1256	2000-034A	TDRS 8	TDRS H	S26388	NASA	Atlas IIA	AC-139	CC	SLC36A		Wire		
2000-035	2000 Jun 30	2208:47	2000-035A	Sirius 1	Sirius 1	S26390	Loral	Proton-K/DM-2M	400-01	GIK-5	LC81/24		NK0008-35		
2000-036	2000 Jul 4	2344:00	2000-036A	Kosmos-2371	Geizer	S26394	MO RF	Proton-K/DM-2	389-02	GIK-5	LC200/39		NK0009-24		
2000-037	2000 Jul 12	0456:36	2000-037A	Zvezda	17KSM No. 128-01	S26400	RAKA	Proton-K	398-01	GIK-5	LC81/23		NK0009-02		
2000-038	2000 Jul 14	0521	2000-038A	Echostar VI	Echostar VI	S26402	Echostar	Atlas IIAS	AC-161	CC	SLC36B		Wire		
2000-039	2000 Jul 15	1200:00	2000-039B	CHAMP	-	S26405	DLR	Kosmos 11K65M	47136-414	GIK-1	LC132/1		NK0009-29		
			2000-039A	MITA	-	S26404	ASI								
			2000-039	BIRD	-	A05007	DLR								
2000-040	2000 Jul 16	0917:00	2000-040A	GPS SVN 48	GPS SVN 48	S26407	USAF	Delta 7925-9.5	D279	CC	SLC17A		Wire		
2000-041	2000 Jul 16	1239:34	2000-041A	Samba	Cluster FM7	S26410	ESA	Soyuz 11A511U	A15000-069	ST09	GIK-5	LC31	NK0009-35		
			2000-041B	Salsa	Cluster FM6	S26411	ESA								
2000-042	2000 Jul 19	2009:00	2000-042A	Sindri	Mightysat 2.1	S26414	-	Minotaur	2	V	CLF		Wire		
			-	Picosat 1	MEMS 1	-	-								
			-	Picosat 2	MEMS 2	-	-								
2000-043	2000 Jul 28	2242:00	2000-043A	PAS 9	PAS 9	S26451	DirectV	Zenit-3SL	-	ODYSSEY, KLA			NK0009-45		
2000-044	2000 Aug 6	1826:42	2000-044A	Progress M1-3	Progress 7K-TGM No 251	S26461	RAKA	Soyuz 11A511U	K15000-668	GIK-5	LC1		NK0010-17		
2000-045	2000 Aug 9	1113:35	2000-045A	Rumba	Cluster FM5	S26463	ESA	Soyuz 11A511U	A15000-070	ST10	GIK-5	LC31	NK0010-02		
			2000-045B	Tango	Cluster FM8	S26464	ESA								
2000-046	2000 Aug 17	2316:00	2000-046B	Nilesat 102	Nilesat 102	S26470	Nilesat	Ariane 44LP	V131	CSG	ELA2		Wire		
			2000-046A	Brasilsat B4	Brasilsat B4	S26469	Embratel								
2000-047	2000 Aug 17	2345:01	2000-047A	USA 152	ONYX 4	S26473	NRO/CIA	Titan 403B	4B-28	V	SLC4E		Wire		
2000-048	2000 Aug 23	1105:00	2000-048A	DM-F3	DM-F3	S26475	Boeing/HB	Delta 8930	D280	CC	SLC17B		Wire		
2000-049	2000 Aug 28	2008	2000-049A	Raduga-1	Globus	S26477	MO RF	Proton-K/DM-2	401-02	GIK-5	LC81/24		NK0010-13		
2000-050	2000 Sep 1	0325	2000-050A	Zi Yuan 2	ZY-2	S26481	CASC	Chang Zheng 4B	CZ4B-3 (62)	TYSC	LC1		Wire		
2000-051	2000 Sep 5	0943:58	2000-051A	Sirius 2	Sirius 2	S26483	Loral	Proton-K/DM-2M	400-02	GIK-5	LC81/23		NK0011-29		
2000-052	2000 Sep 6	2233	2000-052A	Eutelsat W1	Eutelsat W1	S26487	Singapore T	Ariane 44P	V132	CSG	ELA2		Wire		
2000-053	2000 Sep 8	1245:47	2000-053A	Atlantis	OV-104	S26489	NASA JSC	Space Shuttle	STS-106	MPL2, KSC	LC39B		Wire		
			2000-053	Spacehab Double Module	Spacehab Double Module	A05053	NASA JSC								
			2000-053	ICC	Integrated Cargo Carrier	A05054	NASA JSC								
2000-054	2000 Sep 14	2254:07	2000-054A	Astra 2B	Astra 2B	S26494	SES	Ariane 5G	V130 (506)	CSG	ELA3		Wire		
			2000-054B	GE 7	GE 7	S26495	GE								

2000-055	2000 Sep 21 1022	2000-055A	NOAA 16	NOAA L	S26536 NOAA	Titan II SLV	23G-13	V	SLC4W	Wire
2000-056	2000 Sep 25 1010:00	2000-056A	Kosmos-2372	Yenisey	S26538 MO RF	Zenit-2	-	GIK-5	LC45/1	NK0011-36
2000-057	2000 Sep 26 1005:00	2000-057A	TiungSAT	-	S26545 ATSB	Nepr	-	GIK-5	LC109/95	NK0011-40
2000-058	2000 Sep 29 0930:15	2000-058A	Kosmos-2373	Kometa No. 20?	S26552 RKA	Soyuz 11A511U	-	GIK-5	LC31	NK0011-46
2000-059	2000 Oct 1 2200:00	2000-059A	GE-1A	GE-1A	S26554 LMMS	Proton-K/DM-2M	401-01	GIK-5	LC81/23	NK0012-38
2000-060	2000 Oct 6 2300	2000-060A	N-SAT-110	Superbird 5	S26559 SCC	Ariane 42L	V133	CSG	ELA2	Wire
2000-061	2000 Oct 9 0538:18	2000-061A	HETE 2	HETE 2	S26561 MIT	Pegasus H	F30/P-35	L-1011,KMR	RW06	Wire
2000-062	2000 Oct 11 2317:00	2000-062A	Discovery	OV-103	S26563 NASA JSC	Space Shuttle	STS-92	MLP3,KSC	LC39A	Wire
			PMA-3	PMA-3	NASA JSC					
			ITS Z1	Z1	NASA JSC					
2000-063	2000 Oct 13 1412:45	2000-063A	Kosmos-2374	Uragan No.	S26564 MOM	Proton-K/DM-2	393-01	GIK-5	LC81/24	NK0012-43
		2000-063B	Kosmos-2375	Uragan No.	S26565 MOM					
		2000-063C	Kosmos-2376	Uragan No.	S26566 MOM					
2000-064	2000 Oct 16 2127:06	2000-064A	Progress M-43	Progress 7K-TGM No 243	S26570 RAKA	Soyuz 11A511U	K15000-085	GIK-5	LC1	NK0012-34
2000-065	2000 Oct 20 0040	2000-065A	USA 153	DSCS III B-11	S26575 USAF	Atlas IIA	AC-140	CC	SLC36A	Wire
2000-066	2000 Oct 21 0552	2000-066A	Thuraya 1	Thuraya 1	S26578 Thuraya	Zenit-3SL	-	ODYSSEY,KLA		Wire
2000-067	2000 Oct 21 2200:00	2000-067A	GE-6	GE-6	S26580 LMMS	Proton-K/DM-2M	402-01	GIK-5	LC81/23	NK0012-38
2000-068	2000 Oct 29 0559	2000-068A	Europe*Star F1	Europe*Star FM1	S26590 EuropeStar	Ariane 44LP	V134	CSG	ELA2	Wire
2000-069	2000 Oct 30 1602	2000-069A	Beidou	Beidou	S26599 CNSA?	Chang Zheng 3A	CZ3A-5 (63)	XSC	LC2	Wire
2000-070	2000 Oct 31 0752:47	2000-070A	Soyuz TM-31	Soyuz 7K-STM No. 205	S26603 RKA	Soyuz 11A511U	A15000-666	GIK-5	LC1	NK0012-22
2000-071	2000 Nov 10 1714:02	2000-071A	GPS SVN 41	GPS SVN 41	S26605 USAF	Delta 7925-9.5	D281	CC	SLC17A	Wire
2000-072	2000 Nov 16 0107:07	2000-072A	PAS 1R	PAS 1R	S26608 Panamsat	Ariane 5G	V135 (507)	CSG	ELA3	AE-TV
		2000-072B	Amsat P3D	Amsat P3D	S26609 Amsat					
		2000-072C	STRV-1c	STRV-1c	S26610 DERA					
		2000-072D	STRV-1d	STRV-1d	S26611 DERA					
2000-073	2000 Nov 16 0132:36	2000-073A	Progress M1-4	Progress 7K-TGM No 253?	S26615 RAKA	Soyuz 11A511U	K15000-671	GIK-5	LC1	NK0101-02
2000-074	2000 Nov 20 2300:00	2000-074A	QuickBird	QuickBird	S26617 EWatch	Kosmos 11K65M	47165-631	GIK-1	LC132/1	NK0101-21
2000-075	2000 Nov 21 1824:25	2000-075A	EO-1	EO-1	S26619 -	Delta 7320-10	D282	V	SLC2W	Wire
		2000-075B	SAC-C	-	S26620 -					
		2000-075C	Munin	-	S26621 -					
2000-076	2000 Nov 21 2356	2000-076A	Anik F1	Anik F1	S26624 Panamsat	Ariane 44L	V136	CSG	ELA2	Wire
2000-077	2000 Nov 30 1959:47	2000-077A	Sirius 3	Sirius 3	S26626 Loral	Proton-K/DM-2M	402-02	GIK-5	LC81/23	NK0101-31
2000-078	2000 Dec 1 0306:01	2000-078A	Endeavour	OV-105	S26630 NASA JSC	Space Shuttle	STS-97	MPL1,KSC	LC39B	Wire
2000-079	2000 Dec 5 1232	2000-079A	EROS A1	EROS A1	S26631 ImageSat	Start-1	-	GIK-2	LC5	NK0102-26
2000-080	2000 Dec 6 0247	2000-080A	USA 155	NRO satellite	S26635 NRO	Atlas IIAS	AC-157	CC	SLC36A	Wire
2000-081	2000 Dec 20 0026	2000-081A	Astra 2D	Astra 2D	S26638 =	Ariane 5G	V138 (508)	CSG	ELA3	AE-TV
		2000-081B	GE 8	-	S26639 -					
		2000-081C	LDREX	-	S26640 -					
2000-082	2000 Dec 20 1620	2000-082A	Beidou	Beidou	S26643 CNSA?	Chang Zheng 3A	CZ3A-6 (64)	XSC	LC2	Wire
2000-F03	2000 Dec 27 0956:31	2000-F03	Kosmos	Strela-3	F01232 MO RF	Tsiklon-3	-	GIK-1	LC32/1	NK0102-35
		2000-F03	Kosmos	Strela-3	F01233 MO RF					
		2000-F03	Kosmos	Strela-3	F01234 MO RF					
		2000-F03	Gonets-D1	Gonets-D1 No. 7	F01235 RKA					
		2000-F03	Gonets-D1	Gonets-D1 No. 8	F01236 RKA					
		2000-F03	Gonets-D1	Gonets-D1 No. 9	F01237 RKA					
2001-001	2001 Jan 9 1700:03	2001-001A	Shenzhou	Shenzhou	S26664 CASC	Chang Zheng 2F	CZ2F-2 (65)	JQ	SLS	Wire
2001-002	2001 Jan 10 2209	2001-002A	Turksat 2A	Eurasiasat 1	S26666 -	Ariane 44P	V137	CSG	ELA2	Wire
2001-003	2001 Jan 24 0428:42	2001-003A	Progress M1-5	Progress 7K-TGM No 254	S26688 RAKA	Soyuz 11A511U	K15000-673	GIK-5	LC1	NK0103-25
2001-004	2001 Jan 30 0755	2001-004A	GPS SVN 54	GPS SVN 54	S26690 USAF	Delta 7925-9.5	D283	CC	SLC17A	Wire
2001-005	2001 Feb 7 2306	2001-005B	SkyNet 4F	SkyNet 4F	S26695 UK MoD	Ariane 44L	V139	CSG	ELA2	Wire
		2001-005A	Sicral	Sicral	S26694 -					
2001-006	2001 Feb 7 2313:02	2001-006A	Atlantis	OV-104	S26698 NASA JSC	Space Shuttle	STS-98	MLP2,KSC	LC39A	Wire
		2001-006B	Destiny	Destiny	S26700 NASA MSFC					
2001-007	2001 Feb 20 0848:27	2001-007A	Odin	-	S26702 SSC	Start-1	-	GIK-2	LC5	Wire
2001-008	2001 Feb 26 0809:35	2001-008A	Progress M-44	Progress 7K-TGM No 244	S26713 RAKA	Soyuz 11A511U	670	GIK-5	LC1	NK0104-29
2001-009	2001 Feb 27 2120	2001-009A	USA	Milstar-2 F2	S26715 USAF	Titan 401B/Centaur	4B-41 (K-30)	CC	SLC40	Wire
2001-010	2001 Mar 8 1142:09	2001-010A	Discovery	OV-103	S26718 NASA JSC	Space Shuttle	STS-102	MPL3,KSC	LC39B	Wire
			Leonardo	MPLM	NASA JSC					
2001-011	2001 Mar 8 2251	2001-011A	Eurobird	Eurobird	S26719 -	Ariane 5G	V140 (509)	CSG	ELA3	Wire
		2001-011B	BSAT 2a	-	S26720 -					
2001-012	2001 Mar 18 2233:30	2001-012A	XM Radio-2	XM Radio 2	S26724 XM Radio	Zenit-3SL	-	ODYSSEY,KLA		Wire
2001-014	2001 Apr 7 0347:00	2001-014A	Ekran	Ekran	S26736 -	Proton-M/Briz-M	535-01	GIK-5	LC81/24	NK0106-38
2001-013	2001 Apr 7 1502:22	2001-013A	2001 Mars Odyssey	Mars Odyssey	S26734 -	Delta 7925-9.5	D284	CC	SLC17A	Wire
2001-015	2001 Apr 18 1013	2001-015A	GSAT-1	-	S26745 -	GSLV-D1	GSLV-D1	SHAR	PSLV	Wire
2001-016	2001 Apr 19 1840:42	2001-016A	Endeavour	OV-105	S26747 NASA JSC	Space Shuttle	STS-100	MPL1,KSC	LC39A	Wire
2001-017	2001 Apr 28 0737:20	2001-017A	Soyuz TM-32	Soyuz 7K-STM No. 206	S26749 RKA	Soyuz 11A511U	674	GIK-5	LC1	NK0106-30
2001-018	2001 May 8 2210:29	2001-018A	XM Radio-1	XM Radio 1	S26761 XM Radio	Zenit-3SL	-	ODYSSEY,KLA		Wire
2001-019	2001 May 15 0111:30	2001-019A	PAS 10	PAS 10	S26766 -	Proton-K/DM-2M	403-01	GIK-5	LC81/23	NK0107-22
2001-020	2001 May 18 1745:00	2001-020A	GeoLITE	GeoLITE	S26770 -	Delta 7925-9.5	D285	CC	SLC17B	Wire
2001-021	2001 May 20 2232:40	2001-021A	Progress M1-6	Progress 7K-TGM No 255	S26773 RAKA	Soyuz-FG	-	GIK-5	LC1	NK0107-09
2001-022	2001 May 29 1755:00	2001-022A	Kosmos-2377	Kobal't	S26775 MO RF	Soyuz 11A511U	-	GIK-1	LC43/4	NK0107-26
2001-023	2001 Jun 8 1508:42	2001-023A	Kosmos-2378	Parus	S26818 MO RF	Kosmos 11K65M	-	GIK-1	LC132/1	NK0108-21
2001-024	2001 Jun 9 0645	2001-024A	Intelsat 901	-	S26824 -	Ariane 44L	V141	CSG	ELA2	Wire
2001-025	2001 Jun 16 0149:00	2001-025A	Astra 2C	Astra 2C	S26853 -	Proton-K/DM-2M	403-02	GIK-5	LC81/23	NK0108-23
2001-026	2001 Jun 19 0441:02	2001-026A	ICO 2	-	S26857 -	Atlas IIAS	AC-156	CC	SLC36B	Wire
2001-027	2001 Jun 30 1946:46	2001-027A	MAP	MAP	S26859 -	Delta 7425-10	D286	CC	SLC17B	Wire
2001-028	2001 Jul 12 0903:59	2001-028A	Atlantis	OV-104	S26862 NASA JSC	Space Shuttle	STS-104	KSC	LC39B	Wire
			Quest	-	NASA JSC					
2001-029	2001 Jul 12 2158	2001-029A	Artemis	-	S26863 -	Ariane 5G	V142 (510)	CSG	ELA3	Wire
		2001-029B	BSAT 2b	-	S26864 -					
2001-030	2001 Jul 20 0017:00	2001-030A	Molniya-3	Molniya-3K	S26867 MOM	Molniya 8K78M	-	GIK-1	LC43/4	NK0109-38
2001-031	2001 Jul 23 0723	2001-031A	GOES 12	GOES M	S26871 NOAA	Atlas IIA	AC-142	CC	SLC36A	Wire

2001-032	2001 Jul 31 0800:00	2001-032A	Koronas-F	AUOS-SM-KF-1K?	S26873 RKA	Tsiklon-3	-	GIK-1	LC32/1	NK0109-45
2001-033	2001 Aug 6 0728	2001-033A	DSP F21	-	S26880 USAF	Titan 402B/IUS	4B-31	CC	SLC40	Wire
2001-034	2001 Aug 8 1613:40	2001-034A	Genesis	Genesis	S26884 -	Delta 7326-9.5	D287	CC	SLC17A	Wire
2001-035	2001 Aug 10 2110:14	2001-035A	Discovery	OV-103	S26888 NASA JSC	Space Shuttle	STS-105	KSC	LC39A	Wire
		2001-035B	Simplexat	-	S26889 -	-	-	-	-	-
2001-036	2001 Aug 21 0923:54	2001-036A	Progress M-45	Progress 7K-TGM No 245	S26890 RAKA	Soyuz 11A511U	-	GIK-5	LC1	NK0110-18
2001-037	2001 Aug 24 2035	2001-037A	Kosmos-2379	-	S26892 MO RF	Proton-K/DM-2	404-01	GIK-5	LC81/24	NK0110-37
2001-038	2001 Aug 29 0700:00	2001-038A	LRE	LRE	S26898 NASDA	H-IIA 202	H-IIA-1F	TNSC	Y	NASDARept112
2001-039	2001 Aug 30 0646	2001-039A	Intelsat 902	-	S26900 -	Ariane 44L	V143	CSG	ELA2	Wire
2001-040	2001 Sep 8 1525:05	2001-040A	NRO	-	S26905 -	Atlas IIAS	AC-160	V	SLC3E	Wire
2001-041	2001 Sep 14 2334:55	2001-041A	Progress SO-1	Progress	S26908 RAKA	Soyuz 11A511U	677	GIK-5	LC1	NK0111-06
		2001-041	Pirs	-	A05160 RAKA	-	-	-	-	-
2001-F01	2001 Sep 21 1849	-	Celestis-04	CPAC	Celestis	Taurus 2110	T6	V	576E	Wire
		2001-F01	Orbview-4	-	F01239 -	-	-	-	-	-
		2001-F01	QuikTOMS	-	F01240 -	-	-	-	-	-
		-	SBD	-	-	-	-	-	-	-
2001-042	2001 Sep 25 2321	2001-042A	Atlantic Bird 2	-	S26927 -	Ariane 44P	V144	CSG	ELA2	Wire
2001-043	2001 Sep 30 0240	2001-043A	Starshine 3	-	S26929 LMA	Athena-1	LM-001	KLC	-	Wire
		2001-043B	Picosat	-	S26930 LMA	-	-	-	-	-
		2001-043C	PCSat	-	S26931 LMA	-	-	-	-	-
		2001-043D	SAPPHIRE	-	S26932 LMA	-	-	-	-	-
2001-044	2001 Oct 5 2121:01	2001-044A	USA 161	Improved CRYSTAL 5	S26934 NRO/USAF	Titan 404B	4B-34	V	SLC4E	Wire
2001-045	2001 Oct 6 1645:00	2001-045A	Raduga-1	Globus	S26936 MO RF	Proton-K/DM-2	-	GIK-5	LC81/24	NK0112-37
2001-046	2001 Oct 11 0301	2001-046A	USA 162	NRO satellite	S26948 NRO	Atlas IIAS	AC-162	CC	SLC36B	Wire
2001-047	2001 Oct 18 1851:26	2001-047A	QB 2	QB	S26953 -	Delta 7320-10	D288	V	SLC2W	-
spaceflightnow.com										
2001-048	2001 Oct 21 0859:35	2001-048A	Soyuz TM-33	Soyuz 7K-STM No. 207	S26955 RKA	Soyuz 11A511U	672	GIK-5	LC1	NK0112-03
2001-049	2001 Oct 22 0453:00	2001-048B	TES	-	S26956 ISRO	PSLV	PSLV-C3	SHAR	PSLV	www.dlr.de
		2001-049C	BIRD	-	S26959 -	-	-	-	-	-
		2001-049B	PROBA	-	S26958 -	-	-	-	-	-
2001-050	2001 Oct 25 1134:13	2001-050A	Molniya-3	Molniya-3	S26970 MOM	Molniya 8K78M	77013-687	GIK-1	LC43/3	NK0112-45
2001-051	2001 Nov 26 1824:12	2001-051A	Progress M1-7	Progress 7K-TGM No 256	S26983 RAKA	Soyuz-FG	-	GIK-5	LC1	-
2001-052	2001 Nov 27 0035	2001-052A	DirectV-4S	-	S26985 DirecTV	Ariane 44LP	V146	CSG	ELA2	Wire
2001-053	2001 Dec 1 1804	2001-053A	Kosmos-2380	Uragan No.	S26987 MOM	Proton-K/DM-2	-	GIK-5	LC81	Wire
		2001-053B	Kosmos-2381	Uragan No.	S26988 MOM	-	-	-	-	-
		2001-053C	Kosmos-2382	Uragan No.	S26989 MOM	-	-	-	-	-
2001-054	2001 Dec 5 2219:28	2001-054A	Endeavour	OV-105	S26995 NASA JSC	Space Shuttle	STS-108	MLP1, KSC	LC39B	Wire
2001-055	2001 Dec 7 1507:35	2001-055B	TIMED	-	S26998 -	Delta 7920-10	D289	V	SLC2W	-
spaceflightnow.com										
2001-056	2001 Dec 10 1718:56	2001-055A	Jason	Jason	S26997 -	-	-	-	-	-
rosaviakosmos.ru		2001-056A	Meteor-3M	-	S27001 -	Zenit-2	-	GIK-5	LC45/1	-
		2001-056C	Badr B	-	S27003 -	-	-	-	-	-
		2001-056D	Maroc-Tubsat	-	S27004 -	-	-	-	-	-
		2001-056B	Kompas	-	S27002 -	-	-	-	-	-
		2001-056E	Reflektor	-	S27005 -	-	-	-	-	-
2001-057	2001 Dec 21 0400	2001-057A	Kosmos-2383	US-P	S27053 MO RF	Tsiklon-2	-	GIK-5	LC90/20?	-
www.cosmoworld.ru										
2001-058	2001 Dec 28 0324:24	2001-058A	Kosmos	Strela-3	S27055 MO RF	Tsiklon-3	-	GIK-1	LC32/1?	-
rosaviakosmos.ru										
		2001-058B	Kosmos	Strela-3	S27056 MO RF	-	-	-	-	-
		2001-058C	Kosmos	Strela-3	S27057 MO RF	-	-	-	-	-
		2001-058D	Gonets-D1	Gonets-D1 No. 10	S27058 RKA	-	-	-	-	-
		2001-058E	Gonets-D1	Gonets-D1 No. 11	S27059 RKA	-	-	-	-	-
		2001-058F	Gonets-D1	Gonets-D1 No. 12	S27060 RKA	-	-	-	-	-
2002-001	2002 Jan 16 0030	2002-001A	USA	Milstar-2 P2	S27168 USAF	Titan 401B/Centaur	4B-38	CC	SLC40	Wire
2002-002	2002 Jan 23 2347	2002-002B	Insat 3C	-	S27299 ISRO	Ariane 42L	V147	CSG	ELA2	Wire
2002-003	2002 Feb 4 0245	-	DASH	DASH	-	H-IIA 2024	H-IIA-2F	TNSC	Y	Wire
		2002-003B	VEP-3	-	S27368 NASDA	-	-	-	-	-
		2002-003A	MDS-1	-	S27367 NASDA	-	-	-	-	-
2002-004	2002 Feb 5 2058:12	2002-004A	HESSI	-	S27370 OSC	Pegasus XL	F31	L-1011,CC	RW30	Wire
2002-005	2002 Feb 11 1743:44	2002-005A	Iridium	-	S27372 -	Delta 7920-10C	D290	V	SLC2W	-
spaceflightnow.com										
		2002-005B	Iridium	-	S27373 -	-	-	-	-	-
		2002-005C	Iridium	-	S27374 -	-	-	-	-	-
		2002-005D	Iridium	-	S27375 -	-	-	-	-	-
		2002-005E	Iridium	-	S27376 -	-	-	-	-	-
2002-006	2002 Feb 21 1243:00					Atlas 3B	AC-204	CC	SLC36B	Wire
2002-007	2002 Feb 23 0659	2002-007A	Intelsat 904	-	S27380 -	Ariane 44L	V148	CSG	ELA2	Wire
2002-008	2002 Feb 25 1726	1996-007B	Kosmos-2377	Kobal't	S23782 MO RF	Soyuz-U	-	GIK-1	LC43/4	Wire
2002-009	2002 Mar 1 0107:59	-	Envisat	-	-	Ariane 5G	V145 (511)	CSG	ELA3	Wire
2002-010	2002 Mar 1 1122:02	2002-010A	Columbia	OV-102	S27388 NASA JSC	Space Shuttle	STS-109	KSC	LC39A	Wire
2002-011	2002 Mar 8 2259	2002-011A	TDRS 9	TDRS	S27389 -	Atlas IIA	AC-143	CC	SLC36A	Wire
2002-012	2002 Mar 17 0921:17	2002-012A	Grace-1	Grace-1	S27391 Krunichev	Rokot	-	GIK-1	LC133	Wire
		2002-012B	Grace-2	Grace-2	S27392 Krunichev	-	-	-	-	-
2002-013	2002 Mar 21 2013:36	2002-013A	Progress M1-8	Progress 7K-TGM No 257	S27395 RAKA	Soyuz-FG	-	GIK-5	LC1	-
rosaviakosmos.ru										
2002-014	2002 Mar 25 1415	2002-014A	Shenzhou	Shenzhou	S27397 CASC	Chang Zheng 2F	CZ2F-3 (66)	JQ	SLS	Wire
2002-015	2002 Mar 29 0129	2002-015A	Astra 3A	-	S27399 -	Ariane 44L	V149	CSG	ELA2	Wire
		2002-015B	JCSAT 8	-	S27400 -	-	-	-	-	-