



## A Survey of “Secret”, “Spy”, and “Classified” Terminology on Satellite Covers

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Since many military and reconnaissance satellites are launched under a cloak of secrecy, it is left to cover manufacturers to use generic descriptions on launch covers

when the satellite details are unavailable. Often that generic information involves using the words “secret”, “spy”, or “classified” to describe the satellites being launched. This article, while not focusing on any particular series of military/reconnaissance satellites, explores the use of generic descriptive terminology as substitutes for actual details of many military satellite launches.

The authors did an informal and limited survey of terminology found on their collection of satellite launch covers after noticing that certain key words or phrases are used often, while others are much less common. Covers with examples of the featured words will be shown after the survey results are introduced. As a disclaimer to this study, the results presented here are based on the authors’ collection of thousands of launch covers, which we feel is large enough to be fairly representative and informative. However, other cover collectors might find different terminology or statistics. If so, we invite them to share those results with us.

### Terminology and key word statistics

For about 20 years, the authors have posted images of launch covers, not all of which we own, in online lists. Some of the cover images were provided by other collectors. Those lists can be found at the link provided at the end of this article. Since the authors collect mainly un-

Table 1: Secret, Spy, and Classified terminology on American satellite covers

Satellite or Series	"secret" and "top secret"	"secrecy"	"security"	"spy", "super spy", and "spysat"	"classified" and "highly classified"	"mystery"	"unscheduled"	"clint" and "signit"	Terminology total by satellite
Canyon	18			27	1				46
Chalet/Vortex					1				1
Discoverer/Corona	1			2	2				5
DSAP/DMSP	19			2	4				25
DSP	17			27	5				49
IDCSP/DSCS	11	1							12
Jumpseat	4			1	1	1			7
KH (Keyhole)	90		1	6	8		2	4	111
Lacrosse/Onyx	7	1		1	5				14
Magnum/Orion	12		1	2	11			8	34
MIDAS	6			5					11
Nemesis	3				2				5
NOSS	2				2		2		6
NROL	2		1	1	13				17
OV (Orbiting Vehicle)	3								3
Poppy	2								2
Radcat and Radsat	1								1
Rhyolite	8			8	1				17
SAMOS	5			11		1		3	20
SDS/Quasar	3			1	19				23
SECOR	3				1				4
Strawman	3								3
Transit	7				1				8
US-ERS	4			4					8
Vela	2			2					4
scientific rockets	4								4
<b>Word or phrase total for all satellites</b>	<b>237</b>	<b>2</b>	<b>3</b>	<b>100</b>	<b>77</b>	<b>2</b>	<b>4</b>	<b>15</b>	<b>440</b>

manned satellite launch covers, that collection includes many military and reconnaissance satellites. Only recently have we started to add notes about the words or phrases that are the subject of this article. That terminology is summarized in Table 1, which is used as the basis for the discussion to follow.

Table 1 lists the names of 25 American military-related satellites or satellite series in the column at the left. For those satellites, the key words or phrases found on some of their launch covers are listed across the top of the table. The table is a satellite vs. word/phrase matrix in which the numbers of each key word or phrase are provided for each satellite or series. The sums of each column at the bottom indicate the extent of use of each word or phrase across all the satellites listed. The sums of each row on the right are the extent of use of the terminology for each satellite or series.

A quick analysis of the sums at the bottom reveals that "secret" and "top secret" are the most commonly used key word/phrase, at 237, summed over all the satellite launch covers examined in this study. The second most commonly used word or phrase is "spy" or "super spy", with 100 uses, followed by "classified" or "highly classified", with 77 uses. These are also the three words in the title of this article, whose appearance on covers triggered this analysis of their usage.

The sums on the right side of the table indicate that the Keyhole (KH) satellite series has the largest number of words or phrases that were investigated, with a total of 111. The KH sum is followed by the DSAP/DMSP (Defense Satellite Application Program/Defense Meteorological Satellite Program) series with 49, and the Canyon series with 46 uses. Part of the reason that the KH series is first is the large number of them that have been launched (in the hundreds through KH11, with the more recent KH series not yet declassified). The DSAP/DMSP series also involves a large number of launches, at 53. The DMSP series has ended now, with the military moving to a new series of weather satellites still under development. The Canyon series, however, is short, with only 7 launches. Yet surprisingly, Canyon launch covers rank high in the use of the terminology investigated here.

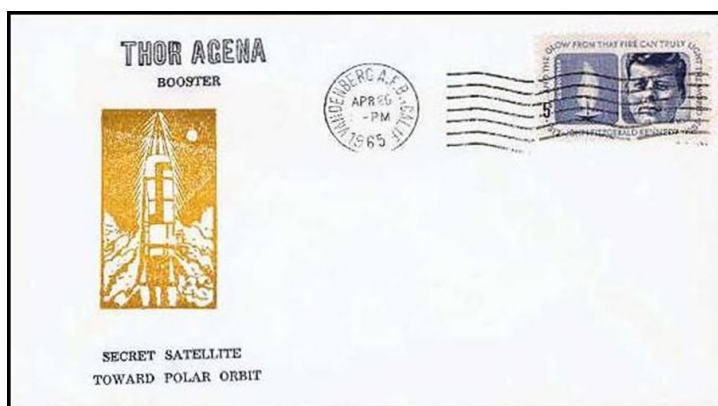
## Selected examples of key words or phrases on satellite launch covers

A few examples of key words/phrases on launch covers are presented in this section. These covers contain just a few of many possible word/phrase combinations. We present a mix of terminology including some of the more unusual combinations. First is a launch cover for Discoverer-39 or KH-4-2 with a Sarzin black printed cachet which includes the words "highly classified secret satellite". Therefore, this cover qualifies for two of the columns in Table 1. There is no indication on the cover of the satellite name, as this launch was still relatively early in the Keyhole (KH) program, with a

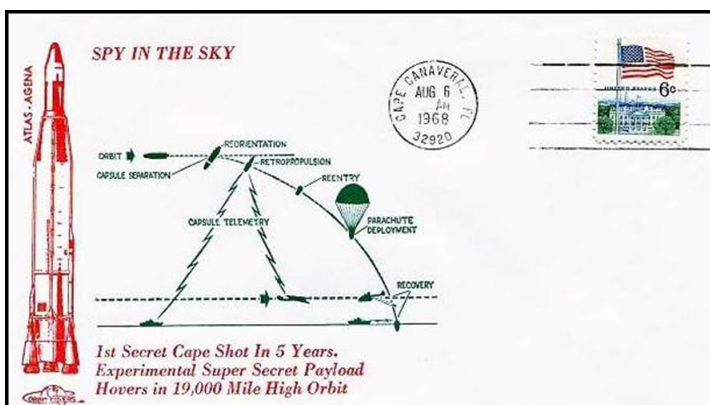
1962-04-17 [yyyy-mm-dd] launch/cancel date. It was at about this time that the deceptive Discoverer cover-up name ended and the KH names came into use (but were not yet used publicly).



A cover with just "secret satellite" in the cachet is the following Goldcraft cover for the launch of KH4A-19 on 1965-04-29. Again, there is no indication of the satellite name, which is determined only by the launch/cancel date (assuming the satellite name and launch date have been declassified).

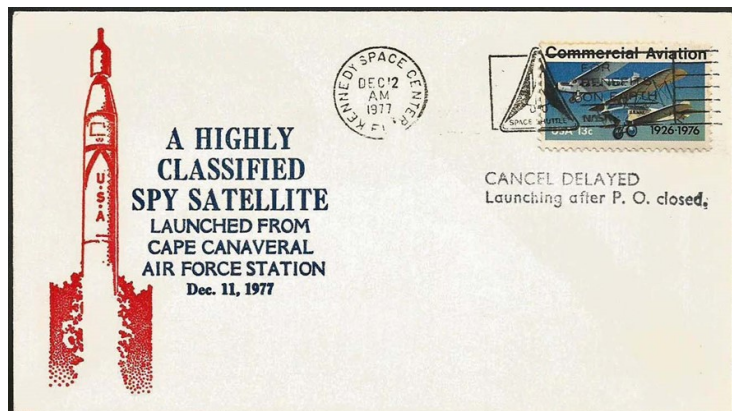


In another example, the following cover for the Canyon-1 launch on 1968-08-06 has the words/phrase "experimental super secret payload". Also, in this Orbit Covers cachet are the phrases "secret Cape shot" and "spy in the sky", an unusual combination of phrases, each of which is found in very few cachets.



Another example of a cover with a unique combination of words is a Rhyolite-3 launch cover from 1977-12-12. The Centennial Covers cachet has "highly classified spy satellite" in the text. This satellite is not directly identified in the

cachet, probably because of the classified status of the Rhyolite series at the time.

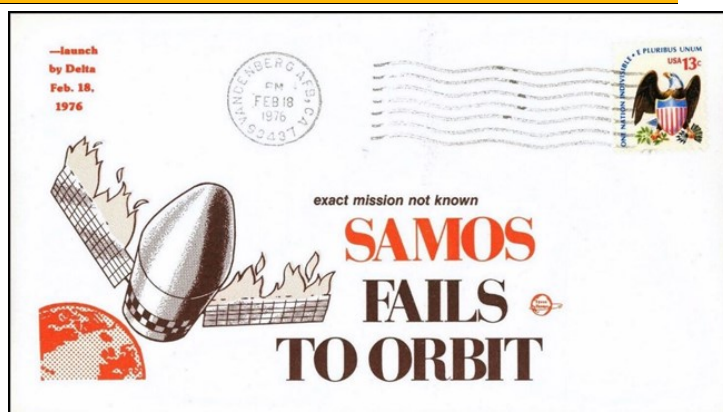


The last of these key word/phrase covers to be shown is a KH-8-36 launch cover that is incorrectly labeled as a SAMOS-89 (Satellite And Missile Observation Satellite) launch from 1972-09-01. There exist a large number of apparent SAMOS covers similar to this one which are misleading to the casual user. Most can be correctly identified as KH launch covers. The “super spy” phrase in this Space Voyage cachet is not as common as “spy satellite” on cachets.



Some other less-common key words or phrases are also noted in Table 1: “secrecy”, “security”, “mystery”, “unscheduled”, and “elint” (electronic intelligence) or “sigint” (signal intelligence). Examples of covers with these words are not included in this article but can be found among the authors’ covers posted online. Of the words or phrases just noted, the word “unscheduled” is particularly interesting, in that the satellite was certainly on some un-announced launch schedule, just not the launch schedule available to the public!

Regarding unique covers, the following DMSP-5C-F3 launch cover from 1976-02-18 has a Space Voyage cachet that clearly expresses the uncertainty in the satellite being launched by using the phrase “exact mission not known”. That phrase is certainly unique among launch covers! Yet, the cover gives the SAMOS name but no specifics, unlike many SAMOS-labeled covers that give SAMOS numbers, although often incorrectly.



Before moving on, the authors would like to make the point that while most of the secret terminology is found on covers from 40 to 60 years ago, the following cover is a much more recent example. The multi-color printed cachet marks a Clio/Nemesis-2 launch from 2014-09-16, using “secret satellite” and “classified military” terminology. These phrases are not seen as often in recent times, as the satellite names are often known, but their missions may still not be clear to most launch cover manufacturers.



Classified military missions and their mystery continue, but possibly somewhat less commonly with more information and more rapid and pervasive communications via the Internet. The authors are interested in learning about any other recent covers with similar terminology, especially from the 2000s and 2010s.

## Program or project codes

In addition to the key word or phrase terminology just discussed, some launch covers have 3-digit program or project codes to identify the mission. The military has employed numerous such codes, a few of which have been found on the launch covers in the authors’ collection. Usage of those program or project codes is summarized in Table 2 on the next page. Examples of launch covers with each of them will be presented after the table results are discussed.

The most common code in the authors’ cover collection is “647”, found on 26 launch covers, primarily but not exclusively on covers for DSP (Defense Support Program) series satellites. Another common code is “467”, found on 10 launch covers, primarily on covers for KH series satellites.

Table 2: Program or Project Codes on American satellite covers

Satellite or Series	Program or project 313	Program or project 467	Program or project 614	Program or project 647	Program or project 777	Program or project code total by satellite
Canyon	3			1		4
Chalet/Vortex				4		4
DSP			2	20		22
IDCSP/DSCS					4	4
KH (Keyhole)		7				7
MIDAS	1			1		2
SAMOS	1	3				4
SDS/Quasar	1					1
<b>Program or project code total for all satellites</b>	<b>6</b>	<b>10</b>	<b>2</b>	<b>26</b>	<b>4</b>	<b>48</b>

The "313" code is found primarily on 3 launch covers for the Canyon series satellites. The "614" code is found on only 2 of the authors' DSP launch covers. Finally, the "777" code is found only on 4 launch covers for the IDCSP/DSCS (Initial Defense Communications Satellite Program / Defense Satellite Communications System) military communications satellites. The authors are interested in learning from other cover collectors about other program or project codes that they have found on launch covers.

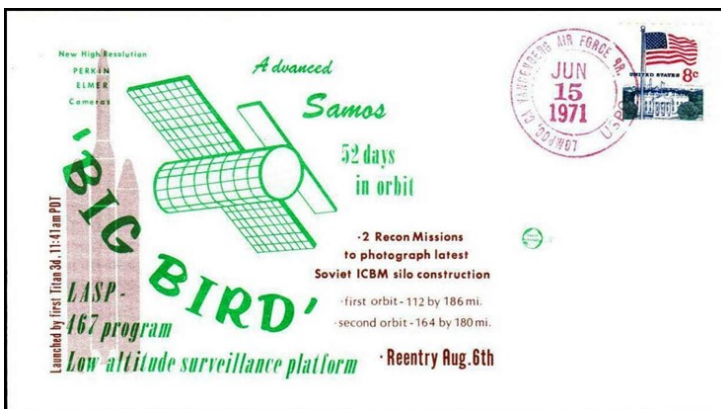
Three of the five program or project codes just discussed are found on launch covers for two or more satellites or series. This reflects a level of uncertainty in the codes provided on those covers. If we assume that the code really applies to only the series with the most uses of it, then the other uses are likely errors. This uncertainty is not unexpected considering the secrecy surrounding many of these launches and the struggle to find solid information for launch cover cachets at the time of launch.

### Selected examples of program or project codes on satellite launch covers

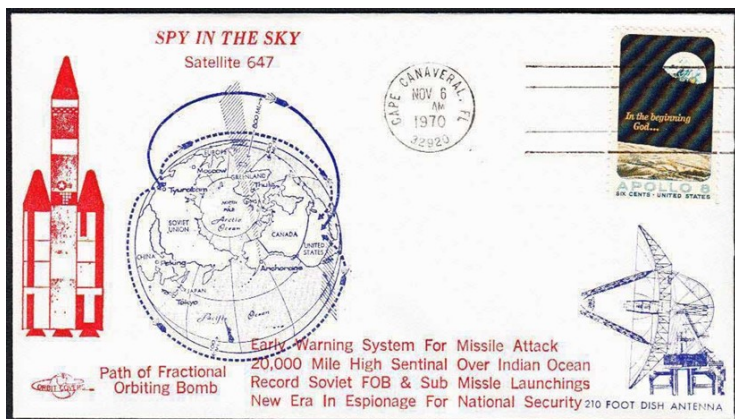
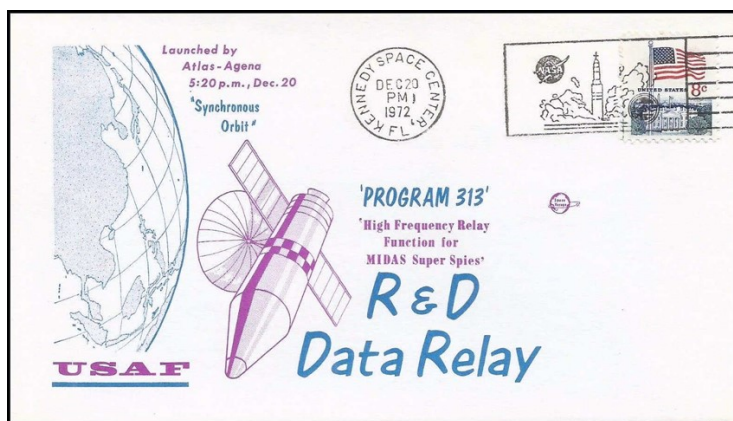
A few examples of the program or project codes are presented next, one for each code found on the authors' launch covers. The first example is a launch cover for DSP-1 from 1970-11-06. The Orbit Covers cachet notes "spy in the sky" as on another Orbit Covers launch cover already presented. However, the cachet also has "Satellite 647", the US Air Force code for the DSP series, which is where most of the "647" codes are found. The "647" code also appears on a few launch covers for non-DSP satellites, most likely in error. As noted above, this is probably a result of the lack of

good information about those launches at the time the cachets were printed.

The "467" code appears primarily on launch covers for the KH series. An example is the cover for the KH9-1 launch on 1971-06-15. Its Space Voyage cachet reads "467 program", as also found on a few other KH launch covers. This cachet also has the phrase "Advanced SAMOS", as well as the words "Big Bird", which was a common name for the KH9 series. Uses of the code "647" are limited to KH launches, but as previously mentioned quite a few KH covers were mistakenly identified as SAMOS launches in their cachets.



The "313" code is seen on the following cover for the Canyon-5 launch on 1972-12-20. The Space Voyage cachet with "Program 313" does not otherwise name the satellite being launched. Other uses of the "313" code noted in Table 2 are likely misidentifications of satellites on covers, leaving the collector to identify the launch by the cancel date and not by the information in the cachet.

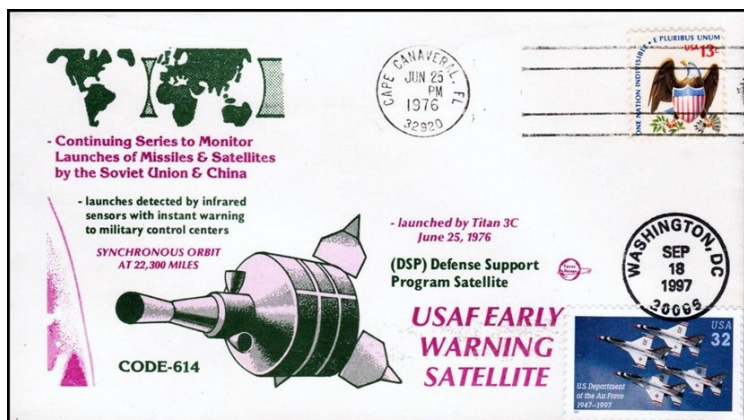


The code number "777" appears to be reserved for defense communications satellites, such as the following DSCS-2-5/6 launch cover with "Project 777" in the SCPS cachet along with the satellite name clearly identified. Although not shown here on a cover, this code was also found noted as "triple 7" on some DSCS-2-11/12 covers.

Finally, the "614" code is found on the following DSP-6 launch cover from 1976-06-25. The Space Voyage cachet has "code 614" in the text along with a nice image of a DSP satellite, which is correctly identified. At the time, these satellites were no longer being kept secret from the public.



(By the way, this cover also has a 1997 first-day cancel for the USAF 50<sup>th</sup> anniversary stamp, Scott 3167.)



This section has shown covers with examples of the 3-digit program or project codes found in the authors' collection of launch covers. Note that the names associated with them vary among "program", "project", and "code". All three words are found to be associated with these codes, so the authors have retained all three words to describe them.

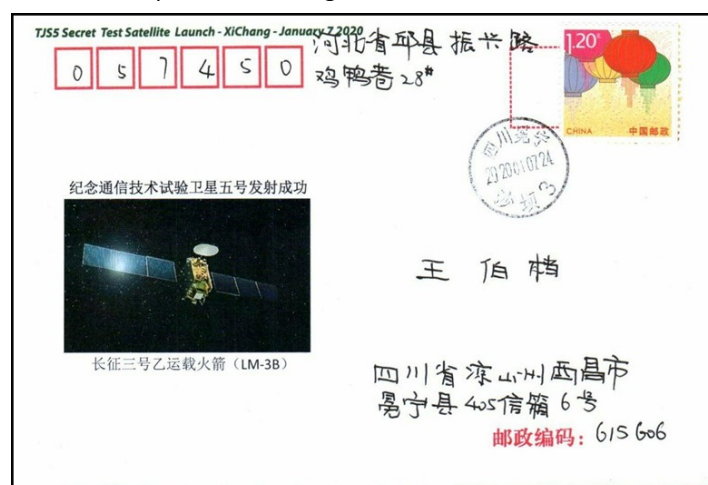
## "Secret" and related terminology on foreign covers

In the authors' experience, such terminology is rare on foreign satellite launch covers. We have however discovered examples on a few Soviet Kosmos launch covers that have cachets not unlike some of those already presented and are possibly of American manufacture. One example is the cover for the launch of Kosmos-641/648 (8 different satellites) by a single rocket on 1974-04-23, shown above right. It has a Space Voyage-like cachet (without a logo). That same cachet was also used for the launches of Kosmos-650 and Kosmos-665, each on a different date. It includes "1974 Soviet secret satellite launches" and two uses of "believed to be" in text, reflecting the uncertainty in the missions of these Kosmos spacecraft.

One further foreign usage with "secret test satellite" is known. It is found on a launch cover for TJS-5 / Huoyan-1-02, dated 2020-01-07. The TJS spacecraft are a new series of Chinese reconnaissance satellites. Interestingly, the cover's cachet includes a depiction of Eutelsat's Quantum satellite, which of course has nothing to do with the TJS program. It



serves as a generic satellite in the cachet so that the actual design of TJS-5 is not revealed. Although most of the text on the cover is in Chinese, the English text at the upper-left contains the phrase that caught the authors' attention.



## References

Previously published information on "secret" launches can be found in the astrophilatic literature. A series of articles by Bruce Cranford, published in *Astrophile* in the early 2000s, covered the USA-numbered series, the majority of which are military satellites. In addition, a series of articles by David Chudwin, published in *Astrophile* in the early 2000s, covered in detail the evolving Keyhole (KH) series satellites. KH launch covers were the source of many of the key words/phrases discussed in this article.

## Biographical notes

The authors have researched and written extensively on the subjects of weather, climate, and un-manned satellites on stamps and covers, as well as other topics. The authors' Un-manned Satellite Philately site can be found at <http://rammb.cira.colostate.edu/dev/hillger/satellites.htm> and a complete list, including PDFs, of the authors' publications is available at <http://rammb.cira.colostate.edu/dev/hillger/stamp-articles.htm>. Email correspondence with the authors is welcomed, using the addresses below.

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