

Un-manned Satellites on Postage Stamps : 35

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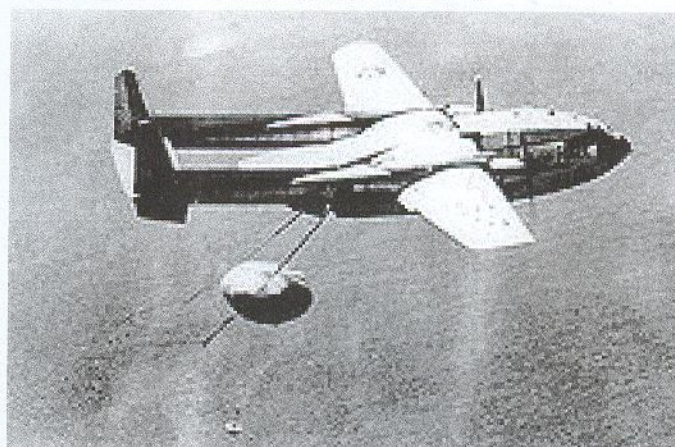
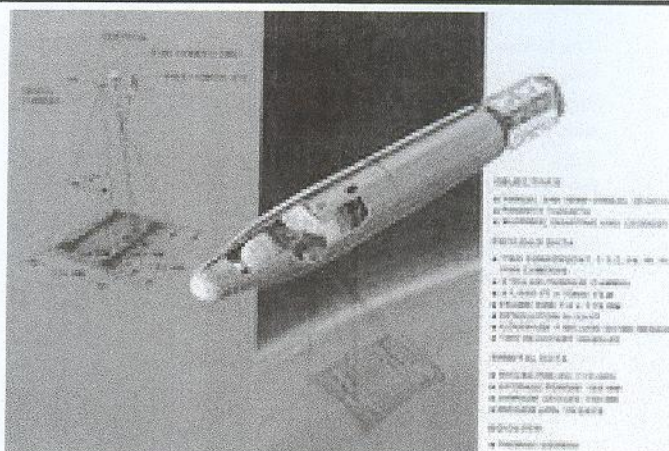
The Discoverer series

This is the thirty-fifth in a series of articles about un-manned satellites on postage stamps. This article features the satellites in the U.S. Air Force (USAF) Discoverer series. The first Discoverer was launched on 21 January 1959 and the last one on 18 April 1962. There were a total of 39 launches, a third (or 13) of which were failures. The Discoverer series, also called Corona satellites, were later declassified as the first Keyhole (KH) spy satellites.

"Discoverer" was the public name of the Corona series of film-return reconnaissance spy satellites, whose true mission was not officially revealed until about 35 years after the program ended. The Discoverers' secret program was masked by scientific goals; it was kept secret even from program staff who knew nothing about Corona. Scientific instruments were even placed on Discoverer satellites, and then covertly removed before launch.

The Discoverer satellites were designed to take pictures of target countries, and then eject a film capsule, which was to de-orbit and enter the Earth's atmosphere on a parachute and be recovered by a specially-modified aircraft as it floated downward. On many of the missions, however, the capture of the film capsules was not successful for various reasons. The first successful return of a capsule through the Earth's atmosphere occurred with Discoverer-13, though in this case the aerial capture failed and the capsule fell into the sea. Fortunately, that mission carried no cameras. Discoverer-14 was the first completely successfully Corona mission, in which reconnaissance photos were taken from the spy satellite and ejected in a capsule which was then successfully recovered in a mid-air capture carried out by a C-119 aircraft.

Because of secret nature of their mission, the Discoverer satellites were not well-known and so were not featured on many postal items. A set of three stamps issued by Libya in 1966 (*Scott 297-299*) shows a Discoverer capsule. There is also a local post item from Batum that depicts the recovery of a Discoverer capsule, and a souvenir sheet from Chad (*Michel BL247*) that shows the re-entry of a Discoverer capsule in the margin. Another capsule recovery is shown in the margin of a souvenir sheet issued by the Malagasy Republic in 1999 (*Scott 1502a*).



Top: KH-4B Corona satellite

Above: Recovery of Discoverer 14 return capsule (typical for the Corona series (ex Wikipedia))

A checklist of postal items identified as showing Discoverer-series satellites (<http://rammb.cira.colostate.edu/dev/hillger/Discoverer.htm>) is available as part of the Website developed by the authors to accompany this series of articles (<http://rammb.cira.colostate.edu/dev/hillger/satellites.htm>). E-mail correspondence is welcome. Don Hillger can be reached at hillger@cira.colostate.edu and Garry Toth at garry.toth@hotmail.com.





Discoverer-series satellites

This page contains philatelic information on the Discoverer-series satellites. Catalog numbers, years of issue, and notes on the satellites featured are given when available. If readers know of additional information or images, please contact the authors using the e-mail addresses at the bottom of this page.

The Discoverer series, also known as Corona satellites, were later declassified as the first Keyhole (KH) spy satellites.

Launch information (found in the military weather-related and scientific/research satellites page)	Launch covers, anniversary-of-launch covers, and launch-related event covers (farther below)	Other postal items (stamps, souvenir sheets, aerogrammes, postal cards, etc.) (immediately below)
Discoverer	Discoverer	Discoverer

Below is a list of Discoverer-series postal items (stamps, souvenir sheets, aerogrammes, postal cards, etc.).

Country	Catalog Number*	Type of Item**	Year of Issue	Notes on Content
Discoverer				
Batum	Local_c	One of MS6 (a-f), also imperforate MS6 (a-f)	1997	Discoverer capsule recovery
Batum	Local_c_op	One of MS6 (a-f) overprinted in gold	1998	Discoverer capsule recovery
Chad	BL247	In (left) margin of SS1	1996	Discoverer-13 re-entry
Libya	297 (Mi210)		1966	Discoverer
Libya	298 (Mi211)			
Libya	299 (Mi212)			
Malagasy Republic	1502a (Mi2398)	In (lower) margin of SS1 (1502)	1999	Discoverer capsule recovery

Below is a list of Discoverer-series launch covers, anniversary-of-launch covers, and launch-related event covers.

Country	Cancel Date	Cancel Location	Type of Item	Notes on Content
Discoverer-1				
United States	1959-02-28	Vandenberg AFB, CA	(Palmer? printed) cachet on cover	Discoverer-1 launch
United States	1959-02-28	Vandenberg AFB, CA	(Holden purple rubber-stamp) cachet on cover	Discoverer-1 launch
United States	1959-02-28	Vandenberg AFB, CA	(Flick printed) cachet on cover	Discoverer-1 launch
United States	1959-02-28	Vandenberg AFB, CA	(Goldcraft) cachet on cover	Discoverer-1 launch (Vanguard-2 image) ²
Discoverer-2				
United States	1959-04-13	Vandenberg AFB, CA	(Flick printed) cachet on cover	Discoverer-2 launch
United States	1959-04-13	Vandenberg AFB, CA	(Goldcraft) cachet on cover	Discoverer-2 launch (Vanguard-2 image) ²
United States	1959-04-13	Vandenberg AFB, CA	(Farley) cachet on cover	Discoverer-2 launch
United States	2009-04-13	Vandenberg AFB, CA	(Mission 57) cachet on cover, also back	50th anniv. Discoverer-2 launch
Discoverer-3				
United States	1959-06-03	Vandenberg AFB, CA	(Goldcraft) cachet on cover	Discoverer-3 launch [failed]
United States	1959-06-03	Vandenberg AFB, CA	(Holden purple rubber-stamp) cachet on cover	Discoverer-3 launch [failed]
Discoverer-4				
United States	1959-06-25	Vandenberg AFB, CA	(Holden purple rubber-stamp) cachet on cover, also back	Discoverer-4 launch [failed]
United States	1959-06-25	Vandenberg AFB, CA	(Holden blue rubber-stamp) cachet on (no.10 gift-shop) cover	Discoverer-4 launch [failed]
United States	1959-06-25	Lompoc CA	(Goldcraft) cachet on cover	Discoverer-4 launch [failed]
Discoverer-5				
United States	1959-08-13	Vandenberg AFB, CA	(Holden red rubber-stamp) cachet on cover	Discoverer-5 launch
United States	1959-08-13	Vandenberg AFB, CA	(Goldcraft) cachet on cover	Discoverer-5 launch
Discoverer-6				
United States	1959-08-19	Vandenberg AFB, CA	(Holden red rubber-stamp) cachet on (no.10 gift-shop) cover	Discoverer-6 launch

Followed by several more pages of lists of covers for all the flights at <http://rammb.cira.colostate.edu/dev/hillger/Discoverer.htm> such as the one below

