

ATV, a crucial supply vehicle for the Space Station and a new challenging topic for Astrophilately collectors

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“The arrival of ATV was welcomed in a festive atmosphere by the ISS inhabitants, since it carried fresh meals and some personal presents”. So Paolo Nespoli recalls the docking of ATV-2 to the International Space Station on Feb.16, 2011. “You know: after a while, after three months of freeze-dried foods and tin cans, all of them have the same taste”.

After the retirement of the Shuttle, the role of ATV has become crucial for supporting ISS activities which now rely on the essential supplies carried by the European ATV, the Japanese HTV and the old Russian Progress, with its one third of the load capacity of ATV.

ATV-1 Jules Verne

Since its first flight, ATV-1 Jules Verne has become a subject for collectors.

The French philatelic Club “La Marianne” (EADS Astrium – France) has issued 4 commemorative covers – offered in a folder – marking respectively ATV leaving the Estec Test Centre (July 13, 2007), Launch of ATV from Kourou (March 9, 2008), tracking by the CELM (March 10, 2008 – cancelled at Biscarrosse, France) and docking to ISS (April 4, 2008 – postmarked at the Control Centre of Toulouse, France).



Two commemorative covers issued by the philatelic Club “La Marianne”(EADS Astrium – France) respectively for the Launch of ATV-1 (Kourou March 9, 2008) and for docking to ISS (April 4, 2008 – postmarked at the Control Centre of Toulouse, Fr.)

Also the ERNO-Philatelie Club (EADS Astrium – Germany) issued 3 commemorative covers respectively for the launch from Kourou (March 9, 2008) and for the docking to ISS (April 4, 2008 – postmarked at the Control Centre of Toulouse (France) and Korolëv Control Center in Moscow, which was in charge of the docking.



Two commemorative covers issued by ERNO-Philatelie (EADS Astrium – Germany) for the docking to ISS (April 4, 2008 – postmarked at the Control Centre of Toulouse, France and at the Korolëv Control Center of Moscow)

ATV-1 also delivered to the ISS a special protective CTB (Cargo Transfer Bag) containing 1200 covers prepared by the French Club “La Marianne” and 550 cards prepared by the German Club “Erno-Philatelie” (EADS-Astrium, Bremen).



On the left, one of the French covers (numbered 1-1200) flown on ATV-1 Jules Verne. 25 covers were marked onboard with the ISS octagonal seal and autographed by the Russian Cosmonauts Sergey Volkov and Oleg Kononenko. On the right, one of the German cards, numbered 1-550. All the items were stored in the Leonardo MPLM (Multipurpose Logistic Module) and returned to Earth on November 30, 2008, on board the Space Shuttle Endeavour STS-126 mission which landed at Edwards Air Force Base in California. The CTB, as a non-priority cargo, was recovered from Leonardo on February 4, 2009 and the covers were postmarked at the KSC Post Office.

«Flight Water»

ATV-1 Jules Verne, in 2008, for the first time carried to ISS drinking water for “use in space”, the so called “Flight Water”. The water used onboard the ISS has to meet the technological and hygienic requirements of the Station’s international crew. Two different quality standards have been set, respectively for the Russian Cosmonauts and the American Astronauts. While Russians require highly mineralized water, fluoridated and disinfected with silver, Americans prefer less mineralised and disinfected with Iodine.

According to a contract signed in 2002, the *Flight Water* is supplied by SMAT (Società Metropolitana Acque Torino), the Public Water Company of Turin (Italy) where Thales Alenia Space is based.

Among the different water sources managed by SMAT it was easy to find the waters able to meet both the Russian and American requirements. Hence the spring water from Pian della Mussa mountains is used for the American Astronauts, while the water for the



Russians is taken from a well in the western area of the Turin Metropolitan District.



A non-postal stamp was issued to celebrate the “Flight Water” agreement in 2002

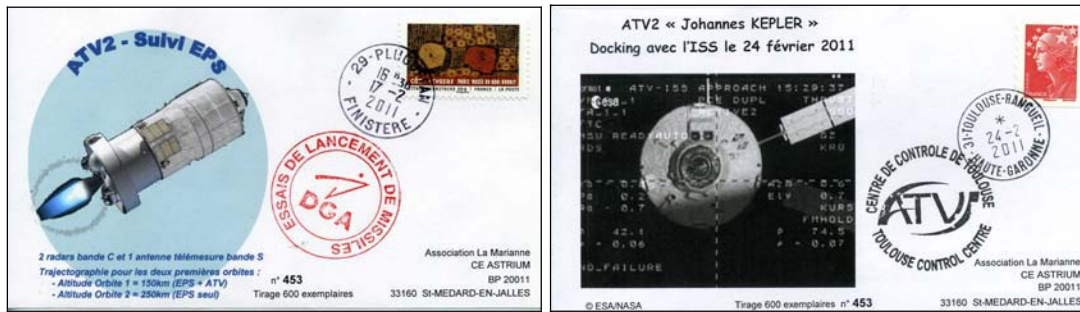
ATV-3 will carry again “Flight Water” in space. A special cover has been prepared by AS.IT.AF. (see the cachet above), and will be cancelled in Kourou on the launch date.

		Launch	docking	undocking
ATV-001	Jules Verne	9 March 2008	3 April 2008	29 September 2008
ATV-002	Johannes Kepler	16 February 2011	24 February 2011	21 June 2011
ATV-003	Edoardo Amaldi	23 March 2012		
ATV-004	Albert Einstein	February 2013		
ATV-005	Georges Lemaître	February 2014		

5 ATV units are planned.. the structure of ATV-4 was delivered in December last year. .
ATV-5 is currently in production in the plants of Thales Alenia Space (Turin, Italy)

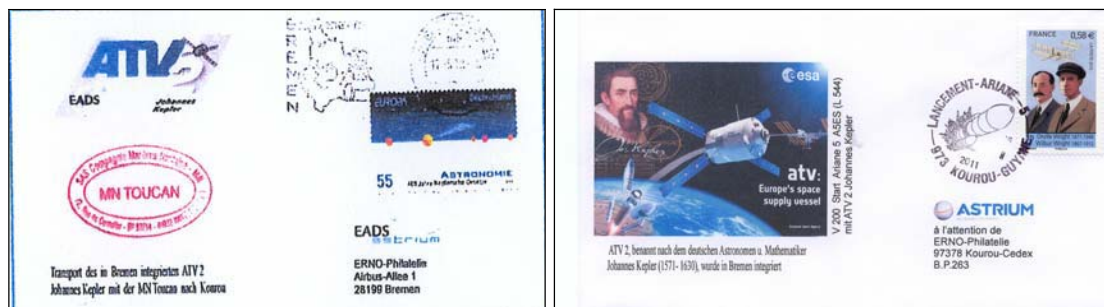
ATV-2 Johannes Kepler

Two commemorative covers were issued by “La Marianne” to celebrate launch and *docking*.



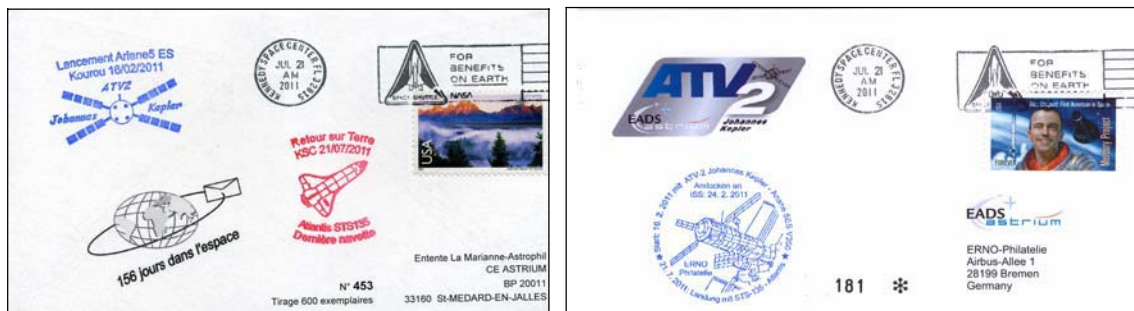
Two “La Marianne” covers on the left, tracking of *ATV-2* (Feb. 17 febbraio 2011 – cancelled at CELM, Centre d'Essais de Lancement de Missiles di Pluguffan, Francia), on the right: docking of *ATV-2* with ISS (Feb. 24 2011)

ERNO-Philatelie issued a ship cover and a launch cover.



Cover prepared for the transfer of *ATV-2* to Kourou onboard the ship *MN Toucan*. Pictorial postmark of Bremen on the day of the delivery (11-05-2010; cancelled on the back at its arrival in Kourou on 25-05-2010). On the right launch cover (Kourou 16-02-2011).

ATV-2 also carried to the ISS philatelic items: 600 covers prepared by “La Marianne”, 550 cards prepared by “Erno-Philatelie” and 600 covers prepared by Thales Alenia Space.



(A)

(B)



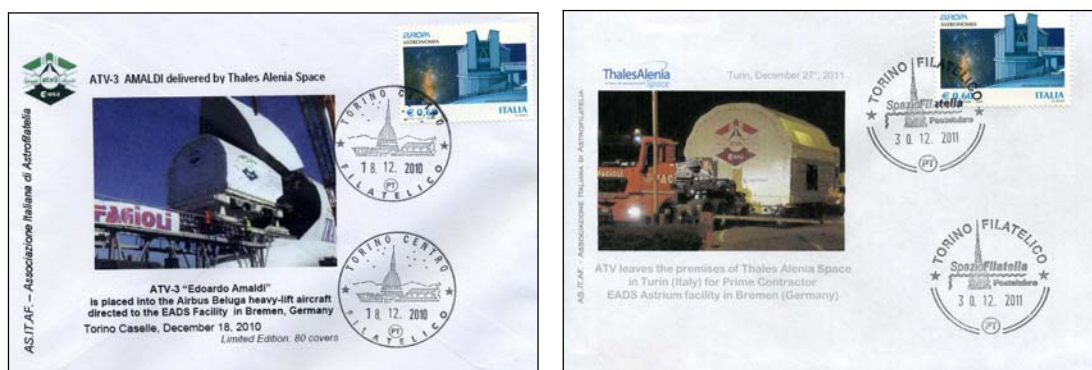
(C)

(D)

The CTB #1442, stored in the *ATV-2 Einstein*, contained an **ISS cover kit** (600 covers type “A” prepared by the French club *La Marianne*), a **First Day Cover Kit** (550 cards type “B” prepared by the German Club *Erno-Philatelie*) and a **Italian Cover Kit** (Type “C”). Following an Agreement with *La Marianne*, *AS.IT.AF.* arranged to have 153 covers marked with the octagonal ISS onboard stamp and to have them signed by all the Expedition 26-27 crew. On the first 74 covers the Italian Astronaut Paolo Nespoli also added the stamp of its *MagISStra* mission (type “D”).

Shortly, on March 23, 2012 ATV-3 Edoardo Amaldi will be launched from Kourou, carrying to the ISS 7 tons of supplies, water, air, spare parts dry cargo and fuel, marking the start of ATV as an annual production-line supply vehicle for the Space Station: the next ATVs, Albert Einstein and Georges Lemaître, will follow in 2013 and 2014, positioning Europe as an essential partner in operating the orbital outpost.

Two commemorative covers were prepared by AS.IT.AF. respectively in December 2010 and December 2011, for celebrating the delivery of the ATV from the premises of Thales Alenia Space in Turin (Italy), where the Pressurized Cargo Carrier is produced, to the prime contractor's EADS Astrium facility in Bremen (Germany), for the final integration.



AS.IT.AF. covers issued for the delivery of ATV-3 (Dec 18, 2010) and ATV-4 (Dec. 27, 2011), leaving Thales Alenia Space's premises for EADS-Astrium. Actually due to technical reasons, the Beluga Aircraft couldn't arrive in Turin and the ATV-4 was stored for two days at the Caselle Airport. The cover was therefore cancelled on Dec. 30 2011, the day on which it was possible to embark ATV on the Beluga and deliver it to Bremen .

Partners of ATV Consortium

EADS Astrium - Bremen (DE)

Programme Management, design, development and production of the Service Module (SM), integration of SM and ICC (Integrated Cargo Carrier) coming from Thales Alenia Space

Thales Alenia Space – Torino (IT)

Design, development and production of the Pressurized Cargo Carrier (PCC), integration of PCC and RDS, delivery of the ICC to EADS-Astrium.

RSC-Energia – Korolëv (RU)

Design, development and production of the Russian Docking System (RDS), RFS (propellant Re-Fuelling system) and RECS (Russian Equipment Control System)



Stamp by Alec Bartos awarded with second prize

The “COSMOS 2011” souvenir sheet designed by our Romanian AS.IT.AF. Member the artist Alec Bartos has been chosen by the National Philatelic Commission among the 3 most beautiful postage stamps which will represent Romania at international competitions in 2012.

“Considering the artistic conception of the design, their originality and personalization, the harmonization of colours and the correlation with printer requirements”, the “COSMOS 2011” souvenir sheet was awarded 2nd place (See <http://alecbartos.com/?p=1154>).

Our warmest wishes to Alec Bartos for his future successes.