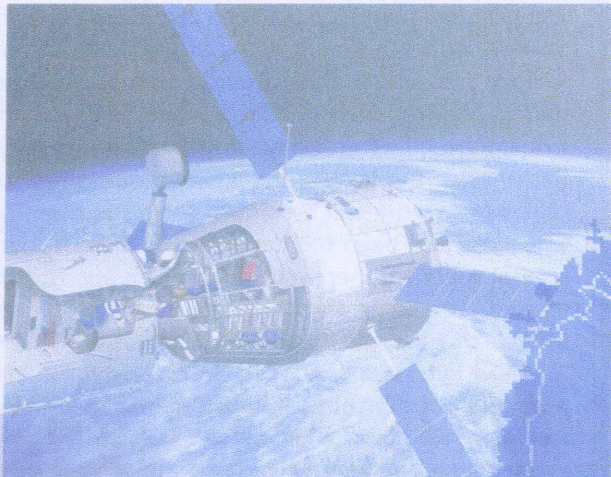


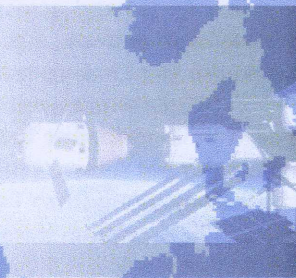
# orbit



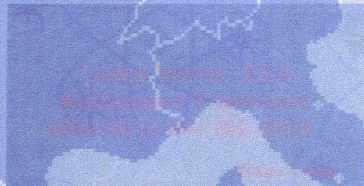
jules verne



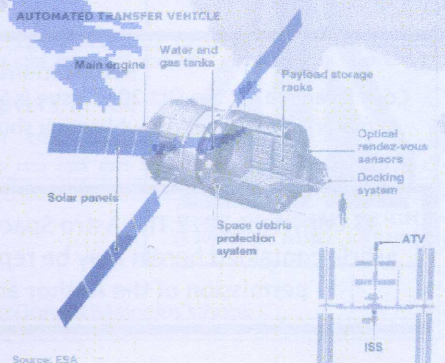
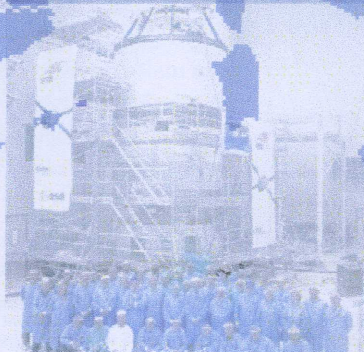
johannes kepler



## atv



edoardo amaldi





# ATV—a challenging new topic for Astrophilately collectors

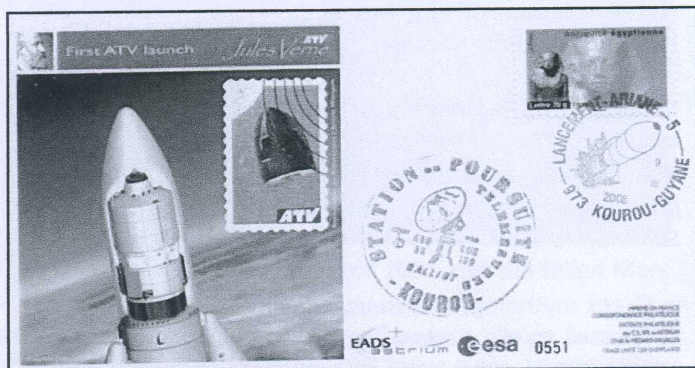
## Crucial Supply Vehicle for the ISS Umberto Cavallaro

*“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 veterm 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 of which (launch and docking) are shown below.



Also the ERNO-Philatelie Club (EADS Astrium – Germany) issued 3 commemorative covers (two of which are shown above) 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 Centre in Moscow, which was in charge of the docking.

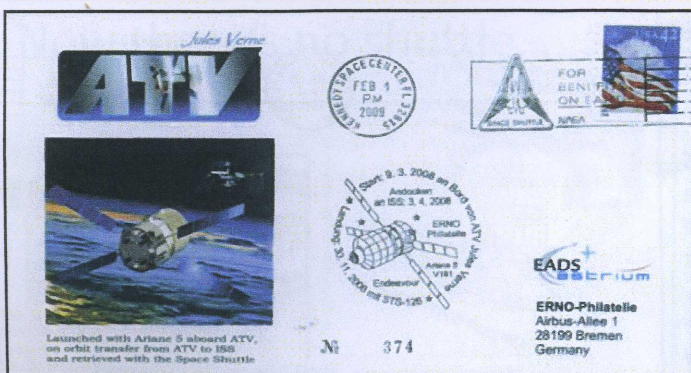
ATV-1 also delivered to the ISS a special protective CTB (Cargo Transfer Bag) containing 1200 covers prepared by the French Club “La Marianne” and 550 cards prepared by the German Club “Erno-Philatelie” (EADS-Astrium, Bremen).



Above 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. Opposite top 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

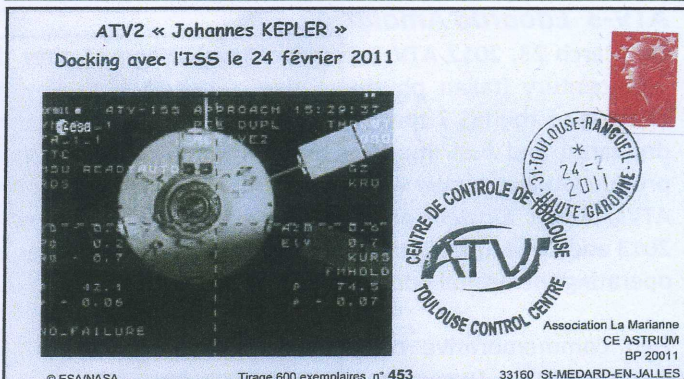
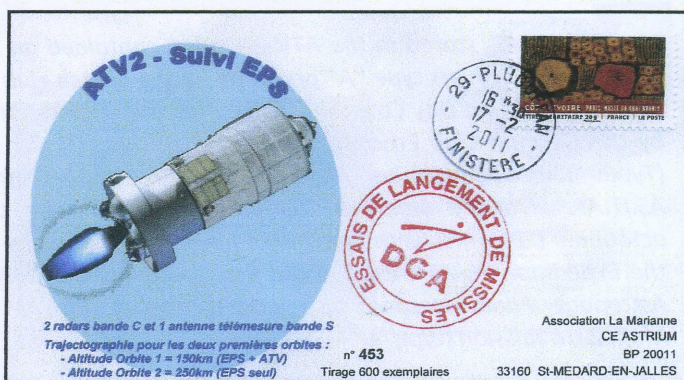
This article first appeared in the March edition (#12) of *Ad Astra* the online journal of AS.IT.AF and is produced with Umberto's permission





**ATV-2 Johannes Kepler**

Two commemorative covers were issued by "La Marianne" to celebrate launch and docking.



**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 on-board 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 Metropolitanata Acque Torino), the Public

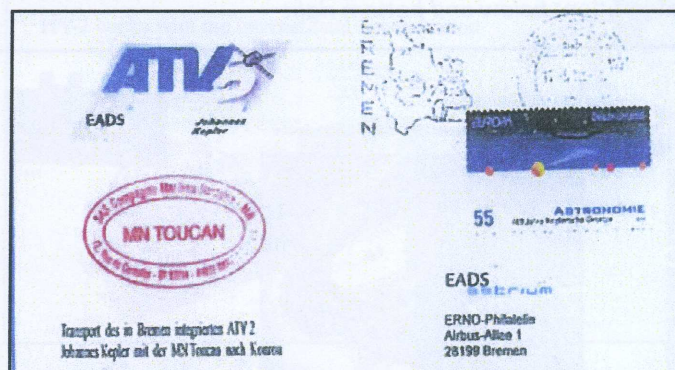
Water Company of Turin (Italy) where Thales Alenia Space is based. Among the different water sources managed by SMAT it was easy to find the waters able to meet both the Russian and American requirements. Hence the spring water from Pian della Mussa mountains is used for the American Astronauts, while 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 would again carry "Flight Water". A special cover was prepared by AS.IT.AF. (see the cachet above), and was to be cancelled in Kourou on the launch date.

Top, tracking of ATV-2 (Feb. 17 February 2011 – cancelled at CELM, Centre d'Essais de Lancement de Missiles di Pluguffan, Francia) and above docking of ATV-2 with ISS (Feb. 24 2011)



ERNO-Philatelia 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).

	Launch	docking	undocking
ATV-001 <i>Jules Verne</i>	9 March 2008	3 April 2008	29 September 2008
ATV-002 <i>Johannes Kepler</i>	16 February 2011	24 February 2011	21 June 2011
ATV-003 <i>Edoardo Amaldi</i>	23 March 2012	27 August 2012 (scheduled)	
ATV-004 <i>Albert Einstein</i>	February 2013		
ATV-005 <i>Georges Lemaitre</i>	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)



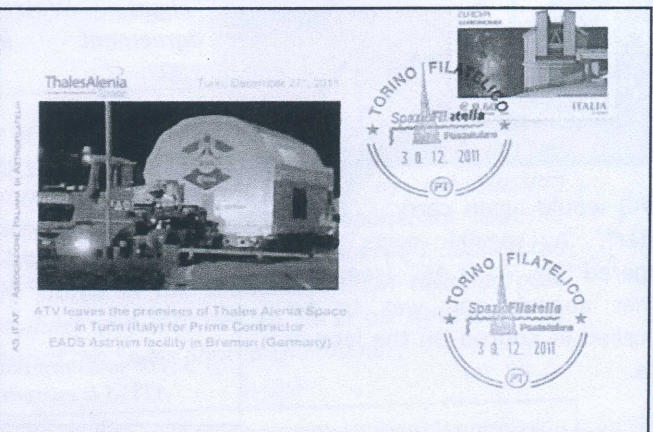
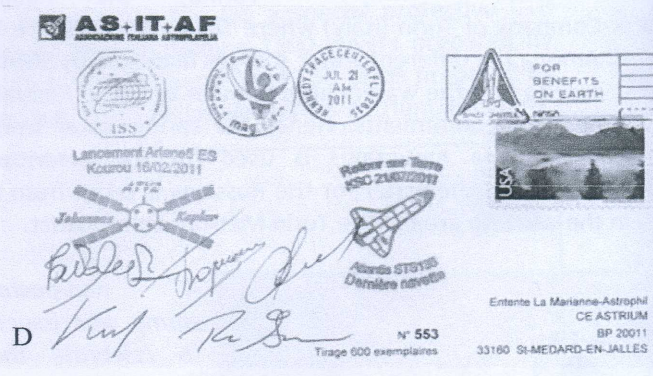
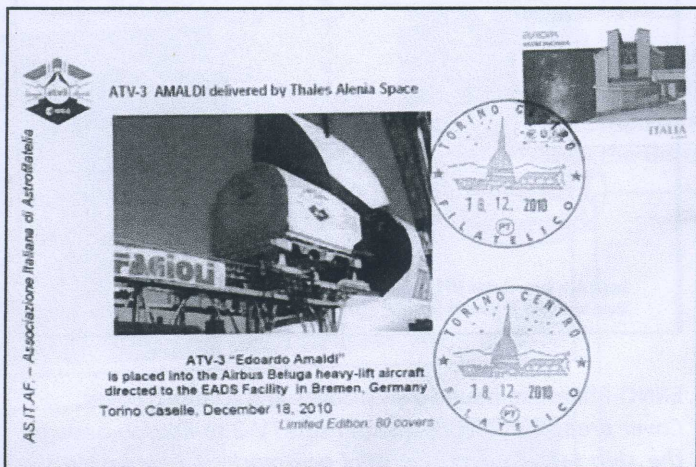
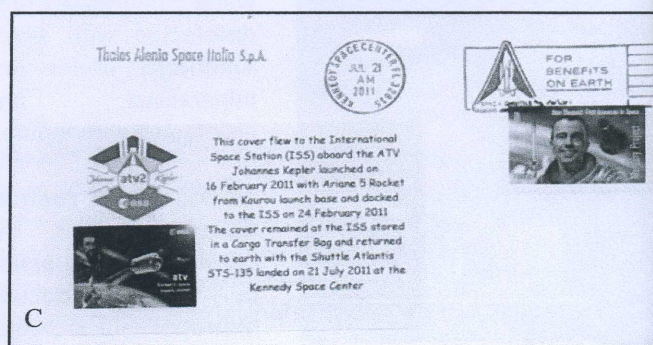
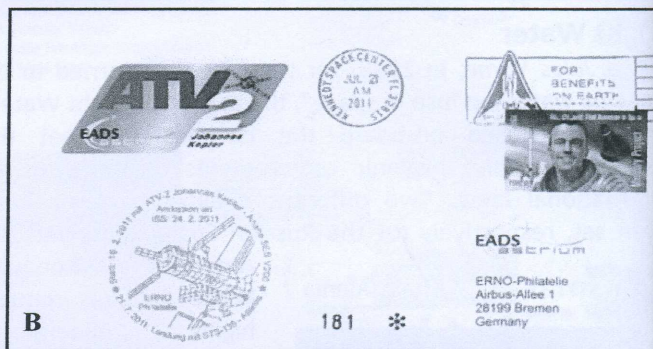
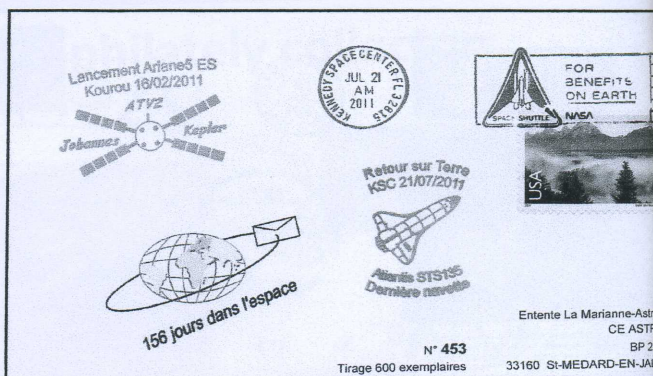
ATV-2 also carried to the ISS philatelic items: 600 covers prepared by "La Marianne", 550 cards prepared by "Erno-Philatelie" and 600 covers prepared by Thales Alenia Space.

The CTB #1442, stored in the ATV-2 Kepler, 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 on-board 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").

**ATV-3 Edoardo Amaldi**

On March 23, 2012 ATV-3 *Edoardo Amaldi* (named after the 20th-century Italian physicist) was 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: *below and bottom right*



**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)