

Hungarian Stamps 2012

MASAT 1



Special stamp in honour of the first Hungarian satellite, Masat 1

Magyar Posta is issuing a stamp to mark successfully putting Masat 1, the first Hungarian satellite, into orbit. The stamp, its first day cover and the cancellation mark were designed by the graphic artist *Glória Hefelle*. 250,000 copies of the new stamp have been made by the state printing company *Állami Nyomda*. The stamp is to be released on 12 April 2012 at a ceremony at a professional forum held at the Budapest University of Technology and Economics. The main motif of the stamp is Masat 1, which is set against a background of the earth and the Hungarian national flag. It is planned that a special message will be sent to radio amateurs from the Hungarian satellite at the time the stamp is issued.

Masat 1 MO-72 is the first entirely Hungarian built satellite, which was launched from the space centre near Kourou in French Guiana at 11 am on 13 February 2012 Hungarian time. The CubeSat standard was devised by California Polytechnic State University, San Luis Obispo, and Stanford University's Space Systems Development Lab. The CubeSat project's aim was to enable the universities involved to perform space science using picosatellites, units of 10×10×10 cm, weighing no more than 1 kg. Students at the Budapest University of Technology and Economics saw a picosatellite developed by the University of Würzburg in 2006, and in 2007 the Masat 1 Development Team, headed by Dr. András Gschwindt, was set up with the backing of teachers and researchers. They decided to build Hungary's first satellite using this standard. The members of the team are András Bükkfejes, Dávid Czifra, Levente Dudás, Sándor Glisics, Gyula Horváth, Emil Hödl, Zoltán Kovács, Gábor Marosy, Tibor Mezei, Tamás Temesvölgyi, Lajos Varga and Zsolt Várhegyi. Their goal was to create a device that would be able to survive the juddering during launch and could function in the extreme environment 300 to 1,450 km from the earth for at least 3 months, communicating continuously with its ground control station. At the last moment a lightweight camera was installed in the satellite. The first successful pictures of the earth were taken after the solar storm in early March 2012. Two departments of the Budapest University's Faculty of Electrical Engineering and Informatics (the Department of Electronic Devices and the Department of Broadband Informatics and Electronic Theory with its Space Research Team) as well as numerous external companies collaborated in the implementation of the project, which has an intellectual value of HUF 300 million. Masat 1 took approximately 56,000 engineering hours to develop. The radio operates in the 70 centimetre amateur band, thus any radio amateur can receive telemetric data in the knowledge of its orbit and using decoding software downloaded from the satellite's web site. (Source: cubesat.bme.hu)

At the same time as the ceremony issuing Magyar Posta's latest stamp, Hungary's central bank, Magyar Nemzeti Bank, will present a numismatic novelty, which likewise commemorates the first Hungarian satellite being put into orbit. At the time of the release of the stamp and the coin, radio amateurs can receive the *MASAT-1 onSTAMP&COIN* message from the satellite.

Order code: 2012101010011 (stamp), 2012101060012 (FDC) • Date of issue: 12 April 2012 • Face value: HUF 310 • Number of copies issued: 250,000 • Perforated size of stamp: 30 x 40 mm (50 stamps/sheet) • Printed by Állami Nyomda • Designed by Glória Hefelle