

# SV High Altitude Balloon

A second mission to fly a HAB as high as Stratosphere carrying enterprising amateur radio configuration

J43VHF is a special call sign for the second (2015) HAB mission

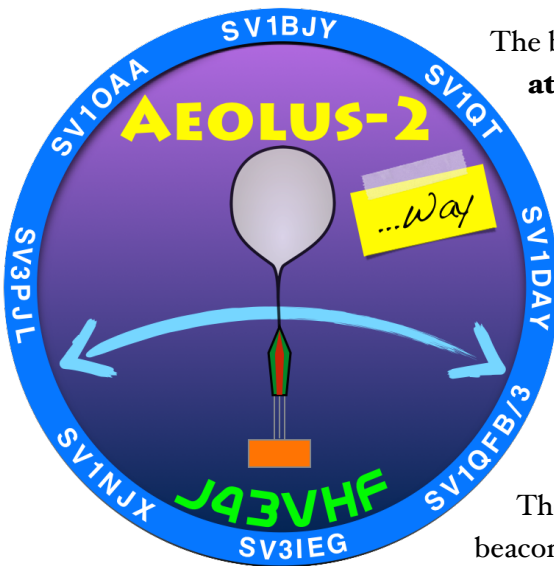
AEOLUS team, a team of greek radio amateurs, shall attempt for a second time to fly up to stratosphere a pioneering payload carrying amateur radio equipment. The special call sign granted for this mission is **J43VHF** and the flight name is **AEOLUS-2WAY**.

## Mission details

The balloon launch is scheduled for **Sunday May, 10 2015** at **11:00 local time** (i.e. eastern european summer time) or else **08:00 UTC**. However, launch time may be affected by prevailing weather conditions or may be delayed appropriately to ensure a safer landing point.

The launch place is a small, unused nowadays airport at Plaka, a location very close to the town of Megalopolis, located in the middle of Peloponnese, the southern peninsula of Greece. (coordinates 37.424775, 22.115378).

The mission will offer not only the well known APRS beacon with GPS and sensor data (coordinates, altitude, temperature, battery voltage) but also an innovative 2WAY communication setup.



Radio Amateurs will be able to communicate with the control station of J43VHF:

1. on **144.220MHz** (2M band) USB modulation, simplex communication with the HAB itself, which bears 2W (two watts) transmit power and a horizontal dipole antenna. The control team will have an uplink to the HAB at 23cm band.
2. on **7.120MHz** (40M band) LSB modulation, simplex communication with the ground control station, which will have the ordinary power of 100W and a multiband dipole.
3. additionally, the **APRS** beacon will be heard as J43VHF-11 on **438.100MHz** (73cm band) **at 1200bps** though, instead of common 9600bps speed used in UHF. The transmitter will have 150mW power.

All radio amateurs are kindly invited to try to trace the balloon or even contact the control team of J43VHF during the AEOLUS-2WAY flight.

A drawing of the communications setup of AEOLUS-2WAY is presented below.

