

New World Record on 10 GHz ATV, 592 km**By Michel Vonlanthen HB9AFO/21.5.96**

On May 18 1996, F1JSR and HB9AFO exchanged pictures on 10 GHz over a path length of 592 km, between Corse Island and Spain. Is this a new world record for 10 GHz ATV ??.



F1JSR spent one week in Corse Island at location JN42RQ, in the Serra di Pigno at a height of 960 meters above sea. His equipment was a DRO synthesised transmitter on 10.450 MHz followed by a travelling wave tube amplifier delivering 20 Watts to an "Ikea" parabolic antenna of 40 cm in diameter. The receive equipment was an offset antenna of 85 cm, a non-modified Astra LNB, a "+500 MHz" converter and a standard tv-sat receiver in parallel with receiver to aim the tv-sat antennas.

From his side, HB9AFO, after successive attempts beginning in the region of Toulon (France), and finishing in the Sierra de Montseny, near Barcelona (Spain) in JN11ET, at an altitude of 1650 meters above sea level. He had a DRO transmitter on 10.480 MHz followed by a 1 Watt transistorised power amplifier driving an "Ikea" 40 cm parabolic antenna. His receiver system consisted of a parabolic antenna of 1 meter of diameter with high precision azimuth/elevation gear, an Astra

modified LNB with a noise factor of 0.7 dB and a AR3000 modified receiver followed by a narrow band ATV FM demodulator in parallel with a normal 12V tv-satellite receiver.

The qso was bi-directional, the signals varying between P0 and P5 colour, with very quick level variations due probably to the strong wind, the fog and the intermittent rain in Corse. Two days before, the same qso was done, HB9AFO being on the Pic de Nore, in the department of Tarn (France) in JN13FJ (574 km). In both cases, the qso were consistent and lasted for more than two hours and took place in the evening.



A detailed report will be publicised in the French and Swiss ATV associations magazines "B5+" (ANTA) and "SWISS ATV NEWS". A VHS video cassette is now in production and will be obtainable at the address of: SWISS ATV, PO box 301, 1024 Ecublens/Switzerland.