## **Content / Inhalt**

## **Antennas and Feeds**

A Simple S/X Dual-Band Coaxial Feed for Satellite Communication by Rastislav Galuscak, OM6AA, Pavel Hazdra, Milos Mazanek	10
A rotatable linear polarisation dish feed for 10GHz by Charlie Suckling, G3WDG	36
Experiments with launcher probes for OK1DFC Septum Feed at 23 cm with a DIN 7-16 Connector by Harke Smits, PA0HRK	52
Parabolic dish with interchangeable transverters - to facilitate DX QSOs on microwaves by Philipp Prinz, DL2AM	59
Making a simple Horn for 47 GHz without a lathe by Andreas Fischer, DL2FZN	65
Evaluating Parabolic Antennas by Joachim Köppen, DF3GJ	68
Twin-boom Yagi Antennas for 144 MHz by Slobodan Bukvic, YU7XL	84
Twin-boom Yagi Antennas for 432 MHz by Slobodan Bukvic, YU7XL	95
Enhancing the Stacked Yagi with the Addition of Z Axis Parasitic Elements by Justin Johnson, G0KSC	104
Designing a Kilowatt plus 144 MHz Cross Polarised Yagi by Hartmut Klüver, DG7YBN	114
Influence of Plastic enclosing a UHF Yagi Element by Hartmut Klüver, DG7YBN	131

## **Premplifier**

Design of a 10 GHz LNA: From simulation to final result	450
by Vincent Grigis, F1OPA	156
Power Amplifier	
How to retrofit Ericsson UMTS SSPAs to obtain 300+ watts on 13cm with 2 x MRF5P21180R6 by Alex Artieda, ZS6EME	169
83 GHz 100mW PA with x6 multiplier for a 249 GHz transverter by Yukio Masuda, JA8CMY	188
<u>Transverters &amp; Mixers</u>	
Triband Transverter for 122 – 134 – 241 GHz by Michael Kuhne, DB6NT	192
The 144 MHz Anglian 3L Transverter by Sam Jewell, G4DDK	201
A Direct 10368 to 28 MHz Image Rejection Mixer by Paolo Antoniazzi, IW2ACD and Marco Arecco, IK2WAQ	216
Measuring Equipment & Miscellaneous	
Understanding the OE9PMJ Microwave Filter for 24, 47, and 78 GHz by Paul Wade, W1GHZ	221
Hints on power measurement in the millimeter bands by Philipp Prinz, DL2AM	250
Very High Gain Amplifier by Daniel Uppström, SM6VFZ	257

ADF5355 - A signal generator for the microwave bands by Ferdinand Schmehr, DC8EC	261
ADF5355 - A signal generator for the microwave bands (2) by Ferdinand Schmehr, DC8EC	263
Low cost sequencer for controlling the VHF/UHF shack by Ivan Shor, RA3WDK	267
Photonic generation of microwave signals, achieved by beating two lasers together by Francesco Carraro, IW3GSH and Federico Sartori, I3QNS	274
<u>Software</u>	
Antenna G/T calculators with open-source code - Part 1: An Antenna G/T calculator (AGTC_lite) without mathematical rotation calculations by Jean-Pierre Waymel, F5FOD, and Hartmut Klüver, DG7YBN	285
Antenna G/T calculators with open-source code - Part 2: An Antenna G/T calculator (AGTC and AGTC_fast) with mathematical rotation calculation by Jean-Pierre Waymel, F5FOD, and Hartmut Klüver, DG7YBN	314
Antenna G/T calculators with open-source code - Part 3: A brief history of the AGTC_lite/AGTC project and some additional references by Jean-Pierre Waymel, F5FOD, and Hartmut Klüver, DG7YBN	339
Antenna G/T calculators with open-source code - Part 4: Thirty years ago, DJ9BV was 100% correct in his antenna Effective Noise Temperatures () calculation article; an important consequence for AGTC_lite by Jean-Pierre Waymel, F5FOD, and Hartmut Klüver, DG7YBN	355
Timing for Portable Digital Operation by Rex Moncur, VK7MO, & Larry Hower, VK7WLH	373

## **Propagation**

The trade winds inversion -Elements for a transatlantic QSO at tropical latitudes by Jean-Louis Maridet, F5DYD