

QEX

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About the Cover

Anthony Le Cren, F4GOH/KF4GOH, sends SSTV images from a sounding balloon transmitter. The SSTV transmitter chain comprises a collection of low-cost modules. An image captured by an ESP32CAM camera module is converted by software into the frequency domain and sent to an AD9850 programmable DDS. After amplification and filtering, the USB SSB signal is radiated by a dipole antenna carried aloft by a sounding balloon. The SSTV image, encoded in Scottie format, is received by a Yaesu FT897-D or with a simple RTL-SDR receiver. A computer then decodes the received image. The sounding balloon transmitter uses two classical SSTV protocols: Martin and Scottie, and transmits in the 14 MHz band with a maximum power of 0.5 watts.



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