

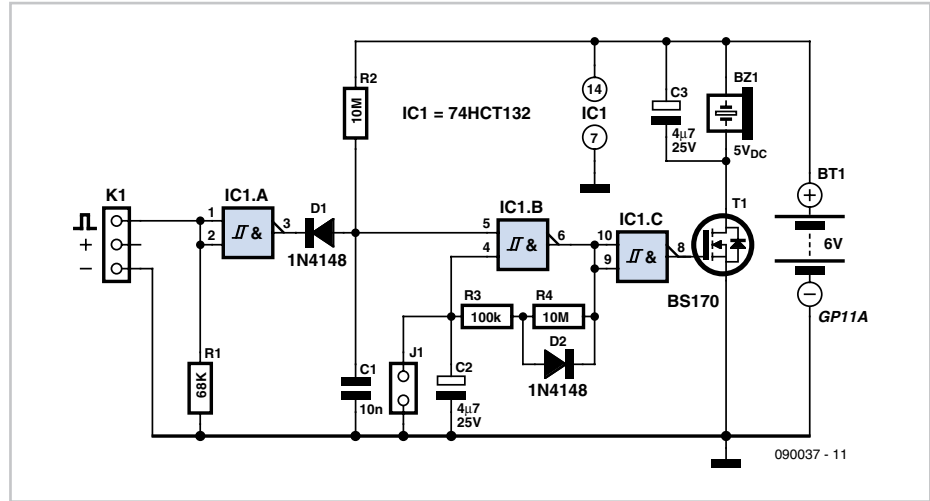
# Acoustic Distress Beacon



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An ELT (Emergency Locator Transmitter, also known as a distress beacon) is an emergency radio transmitter that is activated either manually or automatically by a crash sensor to aid the detection and location of aircraft in distress. This acoustic ELT project is intended for radio-control (RC) model aircraft, which every now and then decide to go their own way and disappear into the undergrowth.

The audio locating device described here enables model aircraft that have landed 'off limits' to be found again and employs its own independent power supply. The small camera battery shown in the circuit activates an acoustic sounder when radio contact is lost and produces a short signal tone (bleep) every ten seconds for more than 25 hours. Current consumption in standby and passive (with jumper J1 set) modes is negligible. The timing generator for the alarm tone is the Schmitt trigger AND-gate IC1.B; its asymmetric duty cycle drives a 5 V DC sounder via



MOSFET transistor T1. All the time that the RC receiver output is delivering positive pulses, the oscillator is blocked by IC1.A and diode D1. Setting jumper J1 parallel to C2 also disables the oscillator and serves to 'disarm' the distress beacon.

## Internet Link

[http://en.wikipedia.org/wiki/Emergency\\_Position\\_Indicating\\_Radio\\_Beacon](http://en.wikipedia.org/wiki/Emergency_Position_Indicating_Radio_Beacon)