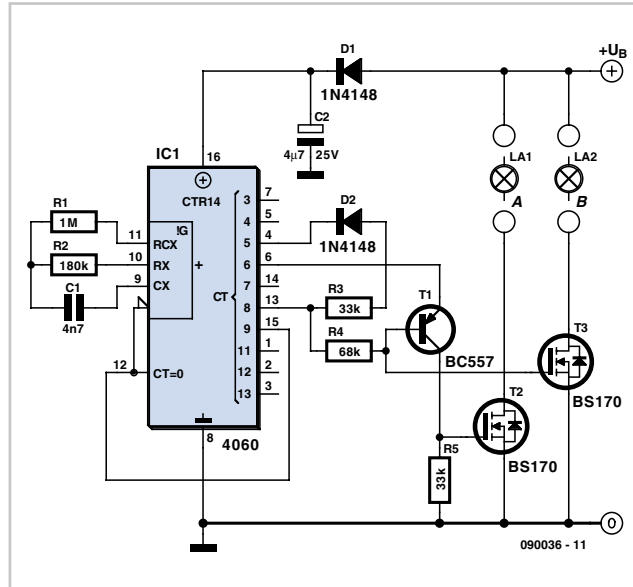


Lighting Up Model Aircraft



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This circuit provides aircraft modellers with extremely realistic beacon and marker lights at minimum outlay. The project's Strobe output (A) provides four brief pulses repeated periodically for the wing (white strobe) lights. In addition the Beacon output (B) gives a double pulse to drive a red LED for indicating the aircraft's active operational status. On the prototype this is usually a red rotating beacon known as an Anti-Collision Light (ACL). The circuit is equally useful for road vehicle modellers, who can use it to flash headlights and blue emergency lights. All signals are generated by a 4060



14-stage binary counter and some minimal output selection logic. Cycle time is determined by the way the internal oscillator is configured (resistor and capacitor on pins 9/10) and can be varied within quite broad limits. High-efficiency LEDs are your first choice for the indicators connected to the Beacon and Strobe outputs (remember to fit series resistors appropriate to the operating voltage U_B and the current specified for the LED used).

The sample circuit is for operating voltages between 5 and 12 V. Current flow through the two BS170 FET devices must not exceed 500 mA.