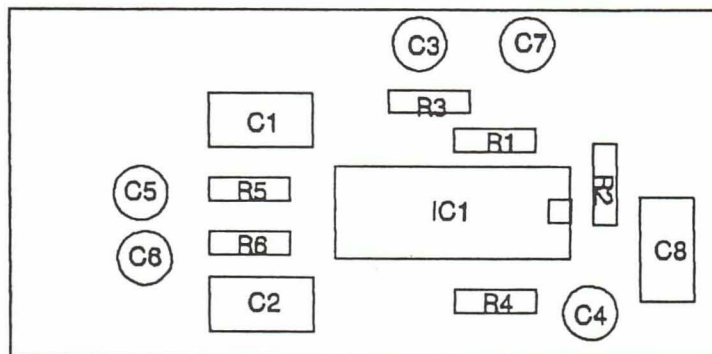
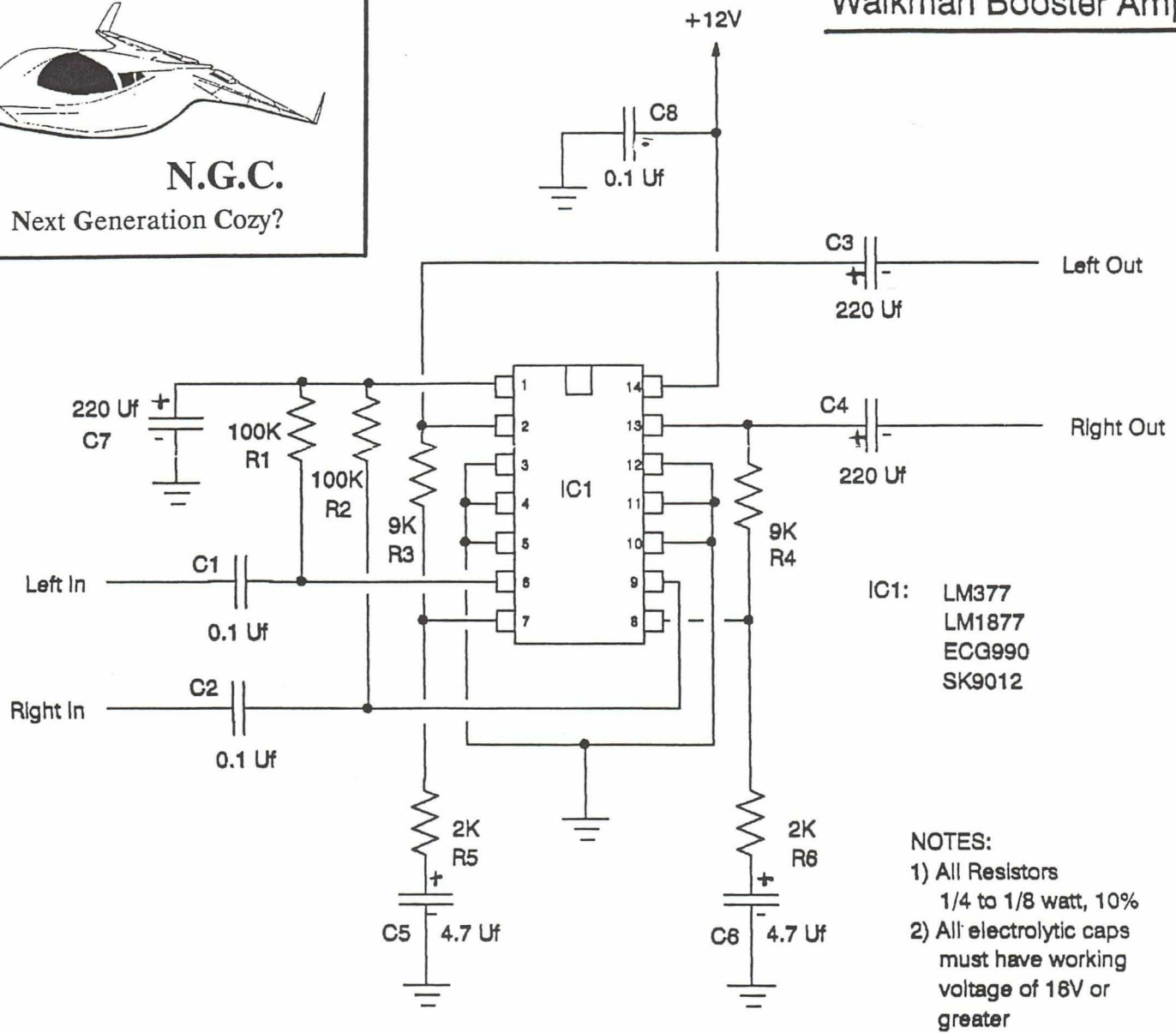
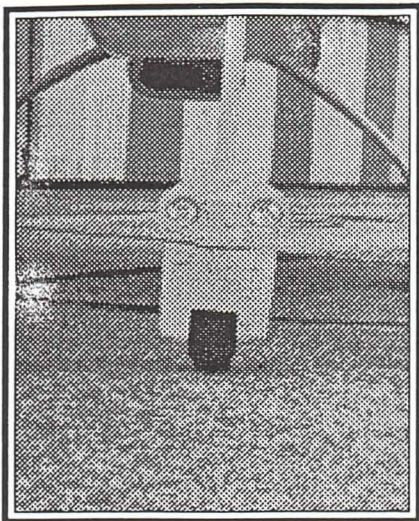


N.G.C.

Next Generation Cozy?

Walkman Booster Amp





Night Lights

Bill Boldenow (IL) - After flying my Vari-Eze, N203DB, for 1,100 hours I took it home and made some mods. Among other things, I added landing lights mounted on the nose gear. They are made out of halogen bulbs which are enclosed in glass reflector housings. I put tail lights on the winglet tops. They are made from a piece of wood turned to 1" diameter and bullet shaped to fit the winglet. I used automotive sockets with 1" test tubes to cover the assembly. It worked really well.

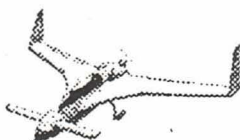
Our Deepest Sympathy is Extended to the McMullens

I regret to report the death of Long-EZ builder, Tom McMullen, of Lake Worth, Florida. Tom succumbed to pancreatic cancer on October 15, 1993.

Tom was a good friend of Ken Miller and built his Long-EZ with the same motor as were built into Ken's.

We shall surely miss Tom and his talents. We have all lost by his passing away. His wife, Eleanor, would no doubt appreciate your notes of support in this time of tragedy.

Mrs. Tom McMullen
4109 Waterway Drive
Lake Worth, Florida 33461



For Sale

Terra Nav-Com TXN 960 new in the box - \$1,200, Alternator - Ward Aero, 60 amp, Ford type, new - \$200.

Call Curtis Clark at (909) 585-7010.

Walkman Stereo Amplifier

Dave Nelson (MI) - These days, an entire stereo system, with AM/FM, cassette, or even CD can be had fairly cheaply - in the form of a Walkman type personal stereo. There is one drawback, though, these personal stereos are designed to drive a single pair of low power head phones and generally, will not prove satisfactory driving your aircraft intercom.

Thanks to integrated circuits, it doesn't take a rocket scientist to build a cheap stereo booster amplifier at low cost and in a small size.

The adjacent circuit uses an IC to

boost the Walkman's output to drive your intercom. This chip can provide up to 2 watts of power output, but we'll use a fraction of it to keep things simple. The stereo inputs are fed into our little wonder via capacitors C1 and C2, which block any DC in the input. The output capacitors C3 and C4 block any output DC. The R1, R2, C7 network limits the popping noise typical upon turn on and off. The R3/R5 and R4/R6 resistors set the gain of the system, and the associated C5 and C6 capacitors provide an AC bypass for the feedback system. C8 provides the amplifier with some isolation from power supply noise.

Circuit layout is not critical, although it makes sense to route the input and output lines away from each other where possible. I built my amp on a 1.5" X 3" circuit board, and used small audio plugs and jacks to connect the input, output, and power supply. I'd recommend putting the IC in a socket unless you are good with a soldering iron. Use 1/8 W resistors and for capacitors C3 - C7 use electrolytic capacitors with at least 16 working volts capability. All components except IC1 are available from Radio Shack. IC1 is available from DigiKey (1-800-DigiKey), and is also usually available from local TV/Radio repair shops (it's commonly used in small stereos). You can use LM377, LM1877, ECG990, or SK9012 - they are all pin compatible parts.

The gain of this circuit is set by the ratio of the R3/R5 and R4/R6 capacitors, as $A_v = (1 + R3/R5)$ (or $A_v = (1 + R4/R6)$). I have selected values to limit the gain to a very small fraction of the useable output. For those that need more gain, increase the value of R3 and R4 - but don't go for gains over 50 since the amplifier may become unstable and begin to oscillate.

The whole works can be built for well under \$20 if you are a scrounger. Adding a workable stereo to your cross country aircraft may seem like an unbelievable luxury until you fly it. Then it will become an absolute requirement. Give it a try. You're sure to be pleased you did!