

## The Indoor Shooting Range

YOU DON'T NEED A 100-YARD RANGE TO HONE YOUR SHOOTING SKILLS. IMPROVE YOUR ACCURACY WITH AN AIR GUN IN YOUR BASEMENT > *By Phil Bourjaily*

**AIR GUNS ARE GREAT** practice for rifle shooting. Quiet, with no distracting recoil, they reward good trigger control and a steady follow-through with exceptional accuracy that you can take to the field. Best of all, air guns are cheap to shoot, and if you've got a big enough basement you don't even have to leave the house to find a range.

**[1] SAFETY EQUIPMENT:** Everyone on the range, not just the shooter, must wear safety glasses at all times to protect their eyes from ricochets.

**[2] REQUIREMENTS:** For pellet guns with velocities below 350 fps, you can set up a range safely in as little as 15 feet. For higher-velocity guns or for better practice, you need 30 feet. Shoot far away from any doors or stairs. No one should be able to walk in from behind the target or from the sides unnoticed by the shooter.

**[3] PELLET TRAP:** Use a cardboard box at least 18x18x12 inches deep. Line the back with a 3-inch layer of magazines. Then fill the rest with tightly crumpled newspaper. Make sure there's nothing metal in it for a pellet to ricochet off of, and tape the target on the front. Check the box often for wear, replacing the newspaper, and changing it as it becomes worn.

**[4] BACKSTOP:** Hang a heavy blanket or canvas tarp as a backstop. Leave the bottom unsecured and loose, to prevent pellets from bouncing back toward the shooters.

## Wire Fusion

CHEAP WAYS TO BE YOUR OWN ELECTRICIAN

> *By John Merwin*

Have to rewire the boat trailer or install electronics? Forget twisting wires together and covering with electrician's tape. These three connections are stronger and safer.

**1. Butt Connector** (about 25¢) Strip a short section of insulation from each wire, insert partway into the connector, and crimp the metal sleeve with a crimping tool.

**2. Adhesive-Lined Heat-Shrink Butt Connector** (about 60¢) First, crimp the connection, then heat the tubing gently with a butane lighter. The tubing shrinks around the wire, while an internal adhesive seals the

joint. This works well for any connections exposed to water.

**3. Heat-Shrink Solder Sleeve** (about 60¢) Similar to adhesive-lined connectors, these also include a solder sleeve. The heating process can be tricky, but it forms the best connection: mechanically secured by the crimping, sealed by the shrink tubing, and with better electrical connectivity.

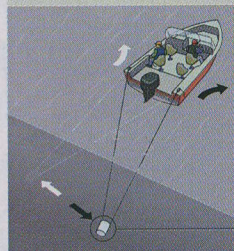


## Emergency Steering

Use a bucket to guide your boat home

> *By Tom Keer*

IF YOUR boat's steering cable goes down, you've got to figure out a way to get back in. Make a drogue. A drogue slows a boat, and if moved from side to side, it can alter a boat's course.



### Method:

**1.** Drill two holes near the handle of a 5-gallon bucket. Run a tag end of a 50-foot nylon line through each side and secure it with double overhand knots on the outsides of the bucket.

**2.** Put your boat in gear, keeping your rpms low.

**3.** Tie off the ends on the stern cleats on the port and starboard sides, making sure the lengths are even.

**4.** Toss the bucket overboard, allowing it to fill with water. Release line slowly—how much varies according to your boat's length—to give the bucket distance from the transom.

**5.** To turn left, shorten the port line. To turn right, let out the line to re-center the bucket and shorten the starboard line.