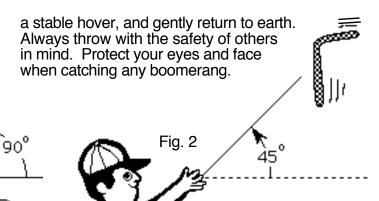
## The Wind Sailor (MTA) Boomerang Tuning & Throwing Instructions

## **Throwing Instructions**

by Ted Bailey © 1990

The two most important factors in throwing the MTA boomerang are the layover and incline angles. The MTA boomerang must be oriented absolutely vertical at the moment of release as depicted in figure 1 below. The MTA boomerang must be launched at an incline (figure 2) of approximately 45 degrees. The incline angle will vary from boomerang to boomerang depending on the tuning. It is best to use a pinch grip. Throwers who wrap their fingers around the tip tend to twist the boomerang during the release to a non-vertical orientation. It is important to generate as much spin as possible. Most throwers have better success by holding the dingle arm instead of the lift arm. Begin each throwing session with light & easy throws until good flight stability is achieved. When thrown correctly, the boomerang will spiral high to great heights, go into



## **Tuning Instructions**

Every MTA boomerang made by Ted Bailey has been thoroughly tuned and tested many times before being sold. If it does not perform well for you, make sure that you are throwing it correctly. The dingle arm should be tuned only as a last resort for reasons of strength.

Adjust the lift arm at the locations depicted in figure 3. If your Wind Sailor does not gain sufficient height, it probably lacks sufficient dihedral on the lift arm. Add a liberal amount of dihedral at (X) and taper off as you go toward the tip. If the Wind Sailor makes low circular flights, twist negative angle of attack into the lift arm at (X). If the Wind Sailor ever goes unstable, add positive angle of attack near the tip of the lift arm at (Z). As a last resort add negative angle of attack on dingle arm at (Y). Don't over tune!! This boomerang is made out of 5 ply 2.5 mm plywood. Don't field tune in cold weather.

