

INSTRUCTIONS FOR PAXOLIN MTA

Differences to "Normal" MTA's:

- the tilt angle is neutral (vertical) to slightly positive
- the elevation above horizon is smaller (also depending on wind and throwing power)

TUNING: also a bit different from wooden sticks:

- only little positive dihedral on both arms
- hardly any twisting of the arms (always start with a neutral position!)

When taken out of the box the MTA will be almost neutral. To start basic tuning:

1. Bend UP lift arm (carefully, not to break the boomerang, flex it several times), keep the elbow-section flat
2. bend UP dingle arm also, so that the space between the tip and the surface it rests upon is appr. 5-8 mm
3. Test throw

CORRECTION:

If the boom doesn't climb high enough:

- a) bend up lift arm a bit more OR
- b) bend up dingle arm a bit more OR
- c) give lift arm a slight negative twist (clockwise) OR
- d) give dingle arm a slight positive twist (counter-clockwise)

DO ALL THESE CORRECTIOS IN SMALL STEPS AND ONE AT A TIME!

If the boom climbs, but doesn't stabilize and spirals down instead:

- a) bend dingle arm back down towards neutral position OR
- b) give dingle arm a bit more positive twist

BASICALLY THERE IS NO "OPTIMUN TUNING" FOR AN MTA: the task is rather to find out the right tuning for MY PERSONAL THROW. Accordingly I would not suggest to bend after each throw, but to find out, HOW THIS BOOMERANG WORKS at first.

I do not suggest to add any extra weights, since this boomerang is quite heavy already plus an airfoil this thin is very sensitive to additional changes.

I hope you'll enjoy yours anyway,

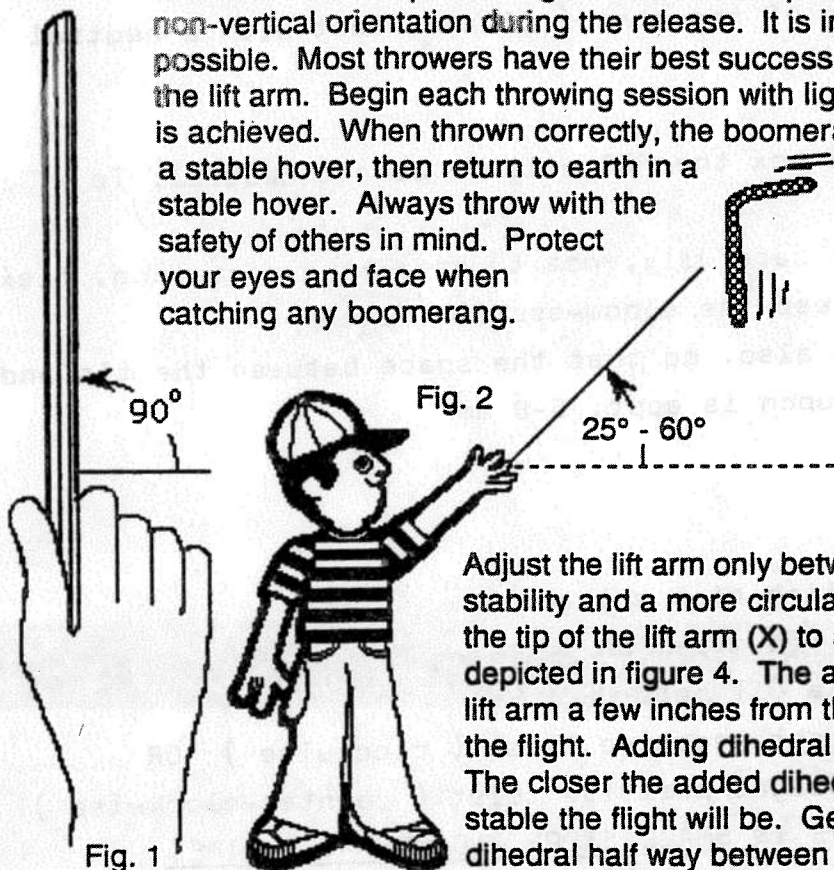
Oliver Becker

Maximum Time Aloft (MTA) Boomerang Tuning & Throwing Instructions

by Ted Bailey © 1991

Throwing Instructions

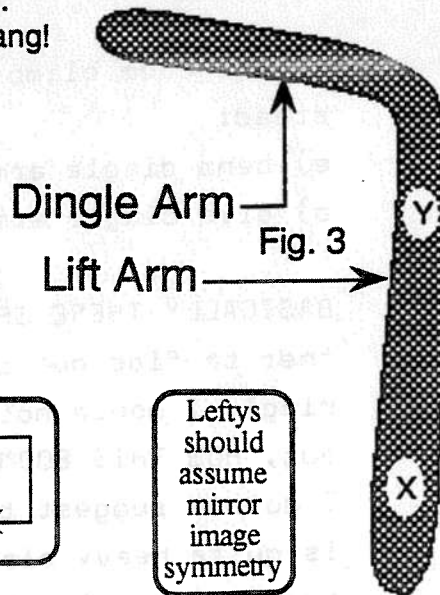
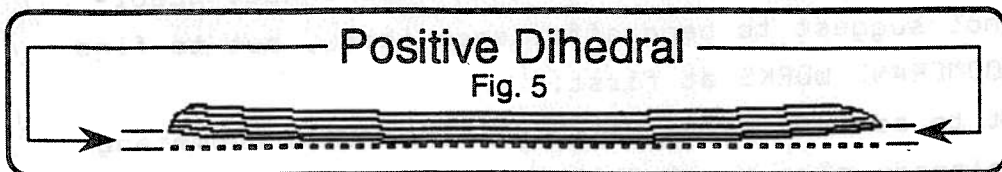
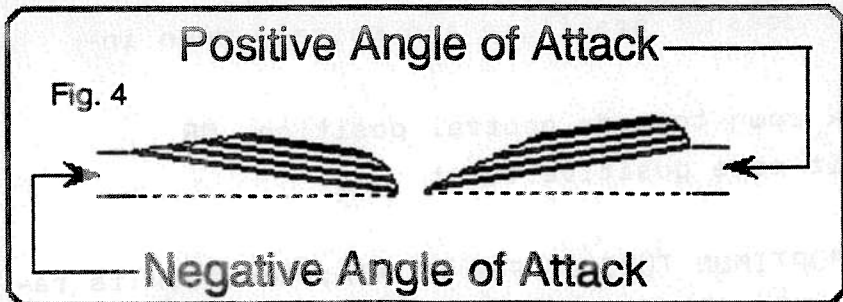
The two most important factors in throwing the MTA boomerang are the layover and incline angles. The MTA boomerang must be oriented absolutely vertical at the moment of release as depicted in figure 1 below. The MTA boomerang must be launched at an incline (figure 2) of between 25 and 60 degrees. The 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 to a non-vertical orientation during the release. It is important to induce as much spin as possible. Most throwers have their best success by holding the dingle arm, rather than the lift arm. Begin each throwing session with light & easy throws until good flight stability is achieved. When thrown correctly, the boomerang will spiral to great heights and go into a stable hover, then return to earth in a stable hover. Always throw with the safety of others in mind. Protect your eyes and face when catching any boomerang.



Tuning Instructions

Every Bailey MTA boomerang has been thoroughly tuned and tested before being sold. If it does not fly well, first make sure that you are throwing it correctly. The dingle arm should have a small amount of positive dihedral and a slight negative angle of attack.

Adjust the lift arm only between locations X & Y in figure 3. Greater stability and a more circular flight profile can be obtained by twisting the tip of the lift arm (X) to an increased positive angle of attack as depicted in figure 4. The addition of negative angle of attack on the lift arm a few inches from the elbow (Y) may increase the height of the flight. Adding dihedral between X & Y will also increase height. The closer the added dihedral is made towards the tip (X), the more stable the flight will be. Generally, you should start by adding dihedral half way between X & Y. Do not overtune a MTA boomerang!



Leftys should assume mirror image symmetry