Possible problems and their solutions:

- The "Paff" does not acchieve any height!
  - > The "bowl" is too small. Bend the arms up.
  - > More positive angle of attack on arm 1.
  - > Throw harder.
  - > Throw higher.

- The "Paff" gains height, but wont stabilize!
  - > More negative angle of attack on arm 2.

- The "Paff" shoots strait up, doesn´t stabilize and crashes down uncontrollable.
  - > Arm 1 is bend up too strong and the angle of attack is too positive.
  - > Never lay over!

- The flight of the "Paff" seems to be perfect.
It goes out far, climbs up high, stabilizes, but looses height far too fast!
  - > Reduce angle of attack both on arm 1 and 2.

- The "Paff" climbs up high, stabilizes for a short period of time, but soon starts to swing and to spiral out of the autorotational position!
  - > The tuning of the MTA was overdone. The "Bowl" is too big.
  Reduce tuning by bending the arms slightly down.

- The flight of the "Paff" is perfect, but it leaves the 50m-circle and so is not possible to make a legal catch.
  - > Change your angle to the wind.
  If the MTA passes you on your left side, throw more to the right.
  If the MTA passes you on your right side, throw more to the left.

TAPIR SPORT-BUMERANGS

INSTRUCTION FOR THE MTAS "PAFF II" AND "PAFF III"

Introduction:

MTAs are modern and highly advanced Sporting Boomerangs. Therefore they are not intended to be used by beginners or children. Please read and follow the instructions carefully. If done otherwise, MTAs can be dangerous or, at least, they wont acchieve the long flights, which they are made for.

What the MTA should do:

The "Paff " does not, like ordinary wooden longflight boomerangs, only complete a circular flightpath with a diameter of approximatly 30m. In fact the "Paff" will, if correctly thrown, fly almost 50m outward, before it will start to make its turn and to gain height (20-25m). During that flight the MTA will gradually change from a perpendicular to a flat, autorotational position.
MTAs made out of Pertinax naturally have a higher weight per volumina and therefore should fly for a shorter period of time than wooden boomerangs. But since the distance and height of the flight are so enormous, the Pertinax MTA will, in fact, fly longer and also stay inside the 50m-circle.

Lefthanders should note, that they have to mirror all instructions!

How to throw the MTA:

The most important thing to keep in mind is ...

+ Never lay over an MTA! Throw it vertical!

Sometimes advanced throwers hold their MTAs "oververtical", which means they don´t lay it over to the right side, but to the left side. The MTA then almost touches the throwers hair. You should only try this to make sure that you don´t lay over.

+ The MTA should not be thrown at groundlevel. Throw it up!
The commonly used angle between the boomerang and the ground is 40-50 degrees.

+ The angle between boomerang and wind is fairly small.
First try 5 degrees. Later you may vary that angle.

These three angles are the source of the most commonly made mistakes. Best results may be acchieved, if you use the knowledge you gained while you threw usual boomerangs.

After all, the MTA is a BOOMERANG!

Besides this, the rate of rotation of the MTA is to be mentioned. Do not throw with all your power, because this might end up in a messed up throw. Not the power is responsible for a succesful flight of the MTA, but the combination of the three degrees and a very high spin rate.

+ A tight grip gives you lots of spin!

Try to throw the "Paff" using the arm 1. This might first appear a bit more difficult, but it will allow the MTA to get higher and therefore fly longer.

At last you got a great throw and an even better flight. Now, please note that you should never loose eye contact to your "Paff". This is the only way to never loose it.

The catch of the boomerang is the coronation of each flight. This is especially true for MTAs, because here you are more than the thrower, you gave the MTA the kiss of life! Despite that, you still should try to keep your fingers from being hit by the fast spinning wings.

+ Catch it, but be careful!

How to tune your MTA:

These tuning advices are to be known thoroughly. Once you are throwing your "Paff" in the field, I bet, you aren´t in the mood for reading! So do it at home. Since MTAs tend to loose they tuning through storage, temperature differences or catching, you have to renew it time and again.
As you can see, the MTA has two different arms. The long arm is "arm number 1" and the other, shorter arm is, obviously "arm number 2". Both arms are connected by the elbow. In comparison to usual beginners´ boomerangs, MTAs need a lot of tuning.

+ Arm 1 needs a positive angle of attack.
+ Arm 2 needs a negative angle of attack.

The angle of attack is the angle between the airfoil of the wing and the top of a table or any other flat surface, which the boomerangs is laid on.

+ Both arms should slightly be bend upwards.
If the boomerang lies on a table, it resembles a bowl. Just try to remember that.

Usually arm 1 needs far more upwards bending than arm 2.
My personal competition MTAs are bend up 6-10mm on arm 1 and 2-5mm on arm 2.

+ Nevertheless, arm 1 is very sensitive for tuning, so do not overdo it!

Always bend your MTA carefully and beware of breaking.
Sorry, but we can´t give any warranty!

If you should have any problems with your "Paff" or any other boomerang, feel free to contact me:

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