

## THROWING INSTRUCTIONS LONG DISTANCE

WELCOME TO LONG DISTANCE BOOMERANGING - one of the most fascinating ways to throw a boomerang. The following tips are mainly for newcomers to this field of boomerang-throwing. I suggest however to read through them before you go outside to have the first throws with your CHALLENGER:

1. MAKE SURE THERE IS PLENTY OF ROOM IN FRONT, BEHIND AND AT BOTH SIDES OF YOU! A SOCCER FIELD IS BY FAR NOT BIG ENOUGH! 2. I suggest the use of a glove on your throwing hand, since distance rangs tend to have sharp leading edges. 3. If you are not used to throw heavy long distance rangs, take off the lead-weight from the underside of the boomerang and see how you can work with the unweighted stick first.

For a FIRST TEST THROW I suggest light wind conditions. Aim about 50 degrees right of the wind, appr. 15 degrees above the horizon with a layover of appr. 50 degrees ( 3S degrees for the unweighted CHALLENGER ), with enough, but not too much power, but plenty of spin. If everything works fine with this throw, i.e. if the boomerang goes on an elliptical return-path, you can continue trying and tuning as you like to. If the rang DOES NOT return with this kind of throw, but continues on a straight flight, a) give a bit more layover and aim a bit lower OR b) twist lift arm a bit positive and dingle arm a bit negative ( but carefully please, specially in cold weather!) OR c) bend both arms up a little bit.

IF the CHALLENGER has a more or less normal flight path how to continue tuning:

If it climbs too high and crashes on the way home: a) throw more vertical OR b) bend down dingle arm a little bit OR c) bend down lift arm a bit OR d) place an extra weight in the elbow section ( about half the size of the main weight ) OR e) aim a bit higher OR f) twist dingle arm slightly positive

If the boomerang stays low enough but doesn't quite make it all the way home: a) put a small weight in the elbow section OR b) throw a little bit higher

If the boomerang lands far behind you giving away half a mile a) add another little weight on the lift arm OR b) throw slightly more vertical OR c) aim a little bit higher OR d) twist lift arm slightly (slightly!) negative

That's basically all you need to know to adjust your Challenger for a satisfying flight-pattern. Take your time and learn how to throw it best, learn how to make small adjustments - and take it easy on your shoulders the first time. Remember: Rome wasn't built in one day either.....

Have fun and a lot of good returns,