Naval Gunnery Target Balloons
Information and Instructions

Killer Banana™ Naval Gunnery Target balloon

Killer Banana™ is a new RADAR reflective target designed to be towed at across the wave surface in low to moderate seas, primarily for RADAR acquisition gunnery target practice or air-to-surface gunnery practice.

It is air inflated, bright **YELLOW**, 6.7 x 3 x 2.3 meters (22 x 9½ x 7½ feet) in size. Made with 12 mil PVC, with a stainless steel metal "D-ring" for towing. Target consists of two large pontoon chambers nested inside a large skirt or boot with reinforced keel and tow ring. Between the pontoons is a set of four vertical chambers housing aluminium reflecting panels each at right angles to the other. Target is intended to have ballast water put inside to weigh down the target and stabilise it during towing; additional water may splash in during use depending on sea state; the amount of water between pontoons is limited by an inflated pillow transom at the rear of the target over which excess water will spill out.

Target is expected to be towed in moderate sea states, in calmer water up to 20 knots max.

Target balloons individually packaged in a cardboard shipping tube or cartons.

Accessories (not included):

- Leaf blower to inflate (such as *Black & Decker* shown, figure 1)
- 15' tie down lines with quick connector clips to secure inflated balloon until deployment.

Leaf blower can be used to quickly inflate target balloon (not included)

Figure 1

General Instructions:

1. Select deck with an area about 30 foot long where there are no sharp objects and where the target can be tied down during & after inflation.

2. Remove the target from its shipping container. Unroll to flat. Fasten handling line to D-ring; tie other end of handling line to something secure. Locate inflation tubes and fittings.

3. Insert blower, exhaust hose or whatever air source is to be used for inflation, into the inflation tubes. Hold inflation tube tight against sides of blower or hose. Begin inflation.

4. As target balloon inflates, have additional personnel hold it against blowing away. Various chambers may be inflated in any order. All inflation points are accessible at any time.

5. Transom Pillow should fill the area between the pontoons to block most water in the bottom of the NavTGT from flowing easily out the back. Inflate to full size, but DO NOT OVER INFLATE, as doing so would reduce tight fit between the pillow and the pontoons. Edges of the pillow should give way to fit against pontoons.

6. Disconnect air source, hand twist inflation tube to hold shut, or seal inflation fitting. Fold over end of inflation tube and tightly roll-up tube except for the last few inches, then "stuff" rolled up tube into itself and into the body of the target (like when inflating an air mattress).

7. Do not over inflate. "Full Inflation" means full to SHAPE but soft to touch. Firmness desired is subject to estimate and judgment of conditions:

-HARDER is faster in smooth seas, but unstable.
-SOFT is better in general, more stable, more durable.
-Very SOFT if anchored in open seas (NOT towed).

7. Untie from secure point onboard. Have personnel pick up target to launch over side.

8. Fill the bottom of the NavTGT FULL with water for ballast. Any excess water will automatically escape out the back over the pillow.

See additional instructions for special uses.


Figure 2

Hold the fill tube to valve by hand during fill operation.


Figure 3

Inflate to SHAPE, soft to touch. Seal valve when chamber full (valve type may vary).

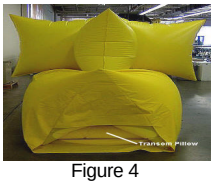
Figure 4

Target inside bottom between pontoons, is intended to be filled with water as ballast.


Figure 5

Transom Pillow holds in water ballast.


Figure 6

D-ring is used to fasten lines for handling, towing and recovery.


Figure 7

When inflated and ready to use, pickup and launch over the side. Add BALLAST WATER.

Warnings:
**Over inflation will damage the target balloon.
***Always ensure Transom Pillow inflation and BALLAST WATER put into NavTGT.

Additional instructions

Line on D-ring should be used for moving or towing target in moderate sea states. Higher speeds up to 20knots may be possible in calm waters, but towing in high sea states will damage the target.

To recover an inflated target balloon, slowly pull a line attached to the D-ring until you can access the inflation tube, open the tube and rotate the target to dump out water ballast, the weight of water ballast can damage the balloon out of the water.

For additional stability, the Transom Pillow could be filled with WATER instead of air, this guarantees a base minimum of water ballast weight onboard at all times.

Ensure pontoons and target chambers are filled to equal firmness. NavTGT should be symmetrical during use to ensure wind resistance is balanced when towed.

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