Killer Banana[™] Naval Gunnery Target Balloon Information and Instructions



Killer Banana[™] Naval Gunnery Target balloon

Killer Banana™ is a new RADAR reflective target (NavTGT) designed to be towed 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 robust "D-ring" for tow line attachment. Target consists of two large pontoon chambers welded to a reinforced multi-layer keel, with nylon webbing fastening a parachute quality high strength D-ring. Between the pontoons is a set of four vertical triangular chambers inflated each at right angles to the other. A transom pillow at the rear is intended to retain ballast water put inside between the pontoons to weigh down the target and stabilise it during towing; additional water may splash in during use depending on sea state; any excess water introduced during use will spill out.

Multiple lightweight carabiners are welded to the NavTGT on the vertical chambers & the transom pillow, for easy line fastening or to mount special equipment.

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

NavTGT individually packed in a 60 x 12¹/₂ inch shipping tube (58 Lbs), includes:

- Killer Banana[™] NavTGT,
- Rigid RADAR corner reflector,
- 50' buoyant polypropylene handling line with 6-inch float
- Instruction sheet

Accessories (not included): Leaf blower (such as shown, figure 1) Laser Tape Kit, IR or Red/White waterproof strobe lights, Steel tow cable.



Inflate NavTGT using any Leaf blower, pressure hose, HVAC vent, engine exhaust, or fan port.

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 (figure 2). Fasten handling line to something secure. Locate inflation nozzle fittings. There are (4) chambers to the top target, (2) pontoons, (1) Transom Pillow, and a central Water Ballast chamber at the base of the target structure (figure 3) for optional use depending upon sea state (do not inflate w air).

3. Insert blower, exhaust hose or whatever air source is to be used for inflation, into the inflation nozzles. Hold nozzle tight against sides of blower or hose. Begin inflation (figure 4).

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. Install RADAR REFLECTOR a top target.

5. Transom Pillow at rear should fill the area between the pontoons to block most water in the bottom of the NavTGT from flowing easily out the back (figure 5). 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. Transom Pillow could be filled with water for additional ballast if desired.

6. Disconnect air source, hand twist inflation nozzle shut.

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).

8. Wrap bow skirt up around front of pontoon chambers, LACE up the sides pulling the pontoons tight together (figure 6).

9. Secure TOW LINE to D-Ring (figure 7). Untie handling line from secure point onboard. Have personnel pick up target to launch over side. If water Ballast chambers were filled, move target with care.

10. Fill the bottom of the NavTGT between the pontoons with water for BALLAST. Any excess water will automatically escape out the back over the Transom Pillow.

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 in tow line and handling line until you can safely access water BALLAST chambers, open nozzle(s). Then lift front by tow line to dump out water ballast, the weight of water ballast can damage the balloon out of the water.

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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Figure 2



Figure 4

Figure 5



Figure 6



Figure 7



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

Warnings:

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

Bottom target chamber between pontoons is optionally filled with water as Ballast.

Lay out flat on deck.

Secure handling line.

Inflate all chambers to SHAPE, soft to touch. Seal nozzle when each chamber full.

Transom Pillow at rear is air filled (optional w water ballast if desired).

Lace up bow skirt tight to pull pontoons together into point.

D-ring at bottom of bow skirt is used to fasten

Tow Line.