

Naval Gunnery Target Balloons Information and Instructions



Killer Tomato™ RADAR (internal corner reflector) Naval Gunnery Target balloon

Killer Tomato™ Naval Gunnery Target balloon is an adrift target designed to stand upright on the wave surface without tumbling over in moderate sea states. Self filling integrated drogue chute / skirt secure bottom of target to sea surface.

It is air inflated, bright **ORANGE**, 3 m³ (10 x10 x10 feet) in size. Made with 12 mil PVC. Stainless steel metal “D-rings” for tie down, handling, minor towing, or floating trip line for recovery purposes.

Integrated, self-deploying, drogue chute (no external sea anchor to buy and rig) reduces target wind drift and keeps target useful in more demanding sea state situations. Can be towed once chute is disabled or water ballast is tipped out using tie line. Radar reflective. Yields a radar signature to ship borne radar equipment from internal rigid corner reflector mounted inside target. Can be detected 10+ miles away depending on radar equipment and sea state.

Target balloons individually packaged in a cardboard box include:

- Cable tie to close fill tube after inflation
- Minor repair kit with 4oz. can of PVC cement, a piece of 12 mil PVC material
- 14' trip/recovery line with float to allow water in drogue chute to be dumped to ease recovery
- Instruction sheet

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 16 square feet where there are no sharp objects and where the target can be tied down after inflation.
2. Unfold and position balloon with black fill tube up.
3. Insert blower, begin inflation. (figures 2 & 3)
4. As balloon inflates, secure it to the deck using lines attached to "D" rings.
5. Do not over inflate. Balloon should be full, but not bulging; the top should be no more than 1ft above the seam of the side panel to the top.
6. Disconnect air source, twist and fold the fill tube, secure with the cable tie included or a length of line (figure 4).
7. A correctly filled balloon measures about 12ft in height. (figure 5)

Warning: Over inflation will damage the target balloon.

Additional instructions specifically regarding the integrated, self-deploying drogue chute.

The drogue chute is weighted causing it to open and fill with sea water immediately after deployment. This keeps the balloon in an upright position, eliminates spinning, and reduces drift. The balloon will of course still move with the prevailing current.

To recover an inflated balloon, slowly pull the floating trip line until all water is dumped from the drogue chute, **the weight of a filled drogue chute can damage the balloon.**

The floating recovery line attached to the bottom of the drogue chute "D" ring should not be used for moving or towing balloon at more than 4 knots maximum. (figure 6)

If the balloon is to be utilised towed upright as a moving target via a long line, the integrated drogue chute must be disabled by cutting the blue sheet of PVC that forms the drogue chute bottom lengthways in two directions using either a sharp knife or a pair of scissors. **Do not puncture the orange balloon material in the process.**



Figure 2

Hold the fill tube by hand during full operation



Figure 3

Note that a plastic drop cloth has been used to avoid damage to the target balloon during inflation
Warning: Over inflation will damage the target balloon

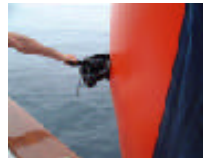


Figure 4

Tie shut inflation tube with tie provided



Figure 5

Self deploying drogue chute shown with floating recovery line attached to "d" ring with a rubber band until needed



Figure 6

The floating recovery line is used to dump water from the drogue chute before lifting or recovery.



Figure 7

If target is to be towed, disable the drogue chute by cutting the blue chute material diagonally corner to corner in two directions

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