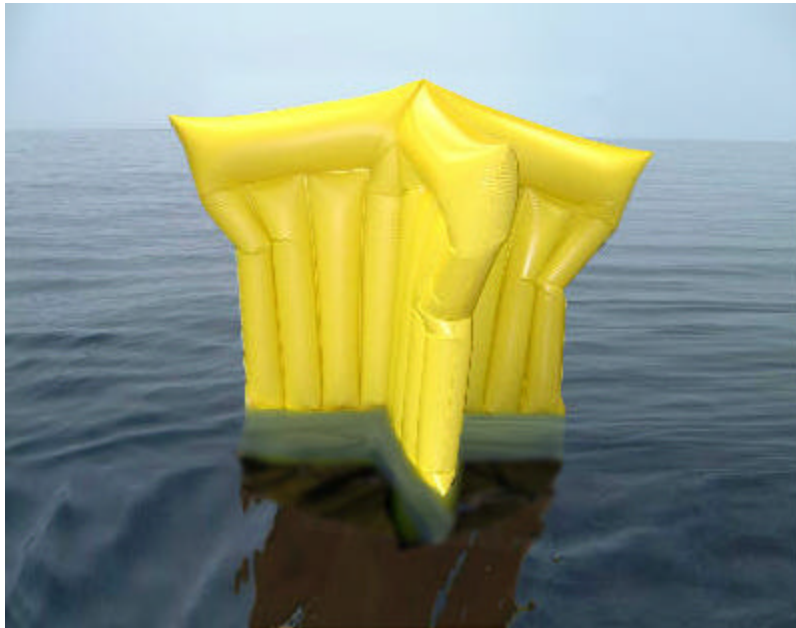


## Naval Gunnery Target Balloons Information and Instructions



Target X-Ray™ Naval Gunnery Target balloon

**Target X-Ray™** is a new adrift target designed to maximize RADAR reflectance in a stable, easily inflated low air volume NavTGT balloon; for use primarily for RADAR acquisition gunnery target practice or air-to-surface gunnery practice.

It is air inflated, bright **YELLOW**, 2.4 x 3.1<sup>2</sup> meter (8ft high, 10x10ft diagonal) in size. Target stands with a submerged base about a foot below the surface, firmly anchoring the inflated target upright to the surface. Made with 12 mil PVC, with stainless steel metal “D-ring” on the bottom with a floating trip line, for handling, minor towing, or for recovery purposes.

This target is designed for Radar reflectance emulating a rigid “corner-reflector”. Aluminum reflecting panels are hung vertically inside the top of each panel providing very nearly flat surfaces at a 90° angle for maximum signal return. May also be used for visual use, as a single target, or in multiple targets together at the same time.

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

Target X-Ray™ is inflated via a twist-lock valve fitting, using any available air source such as a pressure hose, blower, ducted air vent or exhaust of some sort. Each target panel inflates with only 25 cu.ft. of air at low pressure.

[ NOTE: a version of this target is being designed for water activated auto-inflation for launch from ships or aircraft. Contact us for further information and availability. ]

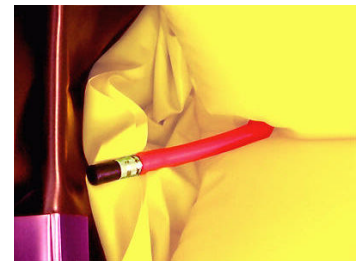


Figure 1

## General Instructions:

1. Select deck with an area of at least 15 foot square where there are no sharp objects and where the target can be tied down during inflation.
2. Remove the target from its shipping tube. Unroll to flat with an inflation nozzle on top. Fasten handling line on D-ring on base to something secure on the deck.
3. Twist open inflation nozzle. Attach, or hold against open nozzle, the blower, exhaust hose or whatever air source is to be used for inflation. Hold inflation nozzle tight against blower or hose. Begin inflation.
4. As each target panel inflates, have additional personnel hold it against blowing away. Do not over inflate. Panels should be full, but not bulging.
5. Hand twist inflation nozzle to lock shut. Remove inflation source.
6. Repeat for each panel.
7. Untie handling line from deck. Have personnel pick up target to launch over side. See additional instructions for special uses.

**Warning:** Over inflation will damage the target balloon.



Figure 2

Locate inflation nozzle on each of four panels.



Figure 3

Target base is weighted and will fill with water to act a ballast to secure target to surface.

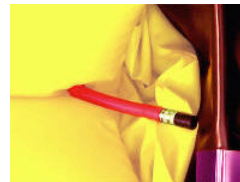


Figure 4

Twist-lock inflation nozzle to seal each panel.

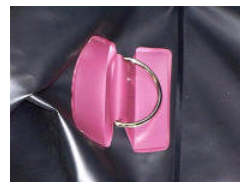


Figure 5

D-ring is used to fasten a line for handling, or recovery.



Figure 6

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

## Additional instructions

To launch a group, bunch, gang, flock or “gaggle” of *Target X-Ray™* balloons simultaneously, inflate and launch each target individually over the side, but with an additional separate line looped through D-rings. String this line through each additional target’s D-ring until all targets are together in the water, all on this single looped line. When ready to turn them all loose, just let go one end of the looped line and pull in the other end.

The fixed line on the D-ring should be used for moving or towing target tipped over on its side at up to only 4 knots maximum.

To recover an inflated target balloon, slowly pull the line attached to the D-ring until you tip over the target to dump out all water ballast in the base. **Do not attempt to lift the target out of the water in the upright position, the weight of water ballast will damage the target balloon.**