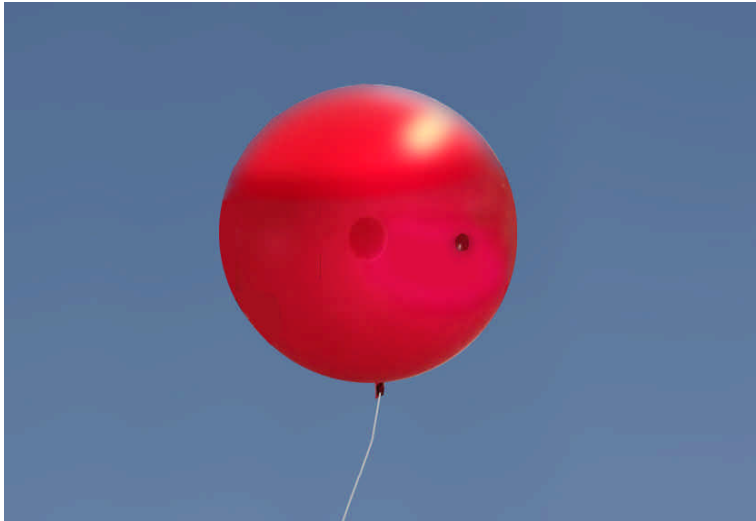




## **INSTRUCTIONS**

### **Bogie Blimp™ RADAR Sphere**



Each blimp is factory inflated and inspected to insure there are no defects or leaks. Please read these instructions in full before use.

#### **HELIUM PURCHASE:**

Tanks of helium may be purchased from your local air products or welding supply company. Most helium suppliers will deliver to your location and pick up the tanks when you are finished.

#### **PREPARATIONS FOR INFLATION:**

Location for inflation should be smooth and clear of any rough or sharp objects. Lay out a tarp to protect the product during inflation. Make sure **ALL** inflation plug(s) on the product are completely closed except for the one you are going to use to inflate the blimp!

Attach the quick link on the end of the tether line to the quick link on the product. Screw both quick links closed and tighten with a small pair of pliers. Unwind around ten feet of tether line and secure to ensure the product does not get away while inflating.

## **INFLATION PROCEDURE:**

This is a two-person operation! One person holds the product at the point where the tether line attaches and the other person inflates the balloon. Screw the brass fitting at one end of the inflation hose into the cock of the helium tank. Slide the other end of the hose into the large inflation plug and hold the material tightly around the hose.

Helium is a nonflammable, non-toxic gas, however it is bottled under extreme high pressure. **WARNING! SLOWLY TURN** the helium tank valve. The flow of helium makes a high-pitched screeching noise and violently flaps the material, which could result in **DAMAGE** to your blimp.

## **COLD WEATHER INFLATION:**

Before the end of the inflation, as the material **STARTS** to flatten out, finish inflation **VERY SLOWLY** to allow the cold material time to stretch without damage! If below freezing, final stage of inflation must be done in several stages.

## **SELECTING THE OPERATIONAL AREA:**

Select an area, which is clear of power line, trees, building, poles and other obstruction, which might damage the balloon as it moves around the sky. At the tie down point and the area around the tether line, make sure there are no objects, which might catch, fray or cut the tether line. **WARNING!** A tether line under tension is easily cut!

## **PROTECT YOUR INVESTMENT:**

The tether line tie down point should be kept away from public access. Individuals have been known to sever a tether line for fun. To prevent vandalism, the product should be lowered and stored when not in use.

Weather changes. Should operations extend over a long time, be prepared to retrieve the blimp for safety, especially at night.

## **INSPECT TETHER LINE BEFORE EACH USE!**

**Tether lines do not “snap”, unless damaged or abraded.**

**Blimps will not be replaced due to tether line accidents or damage.**

Each tether line is hand wound and inspected at the factory before it is shipped. During the initial inspection of your blimp, inspect the tether line for any defect and Do Not Use if any defect is discovered. If your new tether line is damaged, or damaged during use, please contact us to replace or purchase a new tether line, or we can recommend a local source for replacement in many locations.

## **TETHER LINE HANDLING AND OPERATION:**

Letting the tether line slide through your fingers too fast will cause rope burns! It is recommended that you wear hand protection. Blimp flies best using the total length of the tether line. This keeps the product flying above surface wind turbulence. Use of longer tether, for higher flight, adds weight.

## **WEATHER CONSIDERATIONS:**

Once inflated, rain, ice and snow will not hurt the material, but the added weight will reduce the lift and affect the flying performance. Rain should not be a serious problem, however accumulating ice and snow will.

The main weather consideration is WIND! If high winds or thunderstorms are forecast, the product should be pulled down and stored inside. If you do not have an inside storage location, then:

1. Lay out a ground tarp.
2. Tie the tether line off short to a ground anchor.
3. Cover the product with a cover tarp.
4. Anchor the cover tarp securely, pulling the blimp snugly on top of the ground tarp.

## **TEMPERATURE CHANGE FLYING THE BLIMP:**

Helium shrinks in cold temperatures and expands in warm temperatures and at altitude. Things to keep in mind:

1. If you inflate in hot weather, which then cools, the helium will shrink in size. The blimp will become soft. DO NOT add more gas! Volume changes with temperature and altitude. If you add gas when cold, it will expand with warmer temperature or higher altitude and could BURST the blimp.
2. If you inflate in cold weather, which then warms, gas will expand. Allow for expansion of gas when inflating. DO NOT overinflate, or risk damage to the blimp. Inflate soft to touch, but not too soft to properly fly.

## **LEAKS:**

Leaks are usually caused by overinflation or coming in contact with something sharp or rough, which punctures the material.

## **REPAIR INSTRUCTIONS**

Your blimp should fly around seven to ten days before any additional gas is needed. If after only a few hours, or a single day, you notice material is unusually loose, not tight at the surface (and temperature change or an improperly sealed fill plug is not a factor) you may have a leak requiring repair. If it IS due to a loose fill plug, apply a thin application of petroleum jelly / O-ring sealant around the inner lip of the red fill plug and reseal.

### **FINDING A LEAK:**

You can estimate the size hole you are looking for by the amount of helium lost. Large holes can usually be found visually or by slowly moving your moistened palm and forearm back and forth over the blimp surface to feel escaping gas.

The most effective way to locate a very small hole is to shine a light (headlights, spotlight, etc.) on the one side of the blimp as you look over the opposite side for any pinpoints of light shining through. Work in a darkened area during this inspection and mark the point(s) of light with tape or grease pencil so it can be patched.

Another method for finding small leaks is to wipe a soapy cloth over the blimp's surface and look for small bubbles formed by the escaping gas. Again, mark the hole and be certain to let the blimp dry completely before deflating.

### **REPAIRING A LEAK:**

A tiny pinhole can usually be patched with the polyurethane patch material. Cut a tiny piece off to fit over the pinhole and stick it on.

Larger holes, up to ¼ inch diameter, can be patched while the blimp is still inflated. Wipe the damaged area to remove any dirt or grime with the alcohol wipes or rubbing alcohol. Take the patch material and peel off the backing and stick over the hole.

The blimp should be deflated before patching a hole larger than ¼ inch in diameter. Place masking tape over the hole on the outside of the blimp and pull the damaged spot inside out through the inflation hole. Working on a flat surface, apply your patch to the inside of the blimp using the same method as above. The masking tape is needed so that you do not patch the blimp material to itself while working with it deflated. Then, pull the material right side out and then also patch on the outside surface.

If the balloon is damaged beyond your capability it may be repaired at the factory.

## **RADAR REFLECTION:**

Bogie Blimp™ by itself does NOT return a significant RADAR signal.

To obtain RADAR reflection, use the blimp with an external corner reflector available separately.

## **STORAGE CONSIDERATIONS:**

Blimp needs to be **COMPLETELY DRY** before folding up.

Blimp should be stored in a hard sealed container to protect it from unfriendly lifeforms (a plastic container or garbage can is excellent).

Storage location should not be damp or experience periods of high humidity.

Storage in a dry and/or air-conditioned location is best.



**WARNING!**

## **MAJOR PRECAUTIONS!**

1. Tether line must NOT RUB against anything to prevent being cut! <sup>1</sup>
2. Avoid POWERLINES !!!!! <sup>2</sup>
3. Avoid CONTACT with anything than could create holes or leaks! <sup>3</sup>
4. Fold DRY and store in a sealed container, in a dry location, to prevent mold!
5. Use of Hydrogen vs Helium for inflation is very DANGEROUS.  
Hydrogen is highly flammable. Use Hydrogen only with extreme Caution under controlled conditions where loss of blimp cannot cause danger to others.

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<sup>1</sup> Balloons and blimps are used at hundreds of locations worldwide and never have a tether line fail if it had not been ABRADED by something. Tether lines do not “snap” under the conditions in which the balloon or blimp should be flown. Inspect your tether line when you are installing your balloon or blimp and DO NOT use if you see any defects in the tether line. Each tether line is hand wound and inspected before it leaves our shop. We DO NOT replace balloons, blimps or any products because of a tether line breaking.

<sup>2</sup> You are in control. You are responsible for the safe usage of your balloon or blimp.

<sup>3</sup> Balloon is made of a tough, durable material but is lightweight so it will float and will puncture.