My name is: \_\_\_\_\_

Contact me at:

Survey Marker PID: \_\_\_\_\_

Designation:

## What is a benchmark?

Geodetic control points are permanently affixed objects at various locations all over the United States to enable land surveying, civil engineering and mapping to be done efficiently. These objects are usually metal disks, but can be any other object that serves as a control point.

There are two general types of these control points:

1. One type, the vertical control point, is for precisely establishing the elevation at that point. This type of control point is usually, but not always, a small brass or aluminum disk, concrete post, iron pin, or bolt, (among other things), that is permanently attached to a stable foundation.

2. The other general type of control point is for horizontal control. There are several names for horizontal control points - triangulation stations, traverse stations, trilateration stations, GPS stations, and intersection stations, depending on which kind of horizontal control system was used in establishing them and the amount of precision they represent. This type of control point can be a small brass or aluminum disk, concrete post, iron pin, or bolt, (similar to the vertical control points) but also radio towers, water towers, church spires and mountain tops or any other type of object that can be identified from a distance.

In the surveying profession, the term benchmark is applied only to the vertical control type, but for sake of discussion on the Geocaching website, both vertical and horizontal control points are commonly referred to as benchmarks.

These markers are part of the geodetic control network created and maintained by the National Geodetic Survey (NGS). The NGS maintains a database of these locations. In the database, each geodetic control marker has a PID (Permanent IDentifier) number, and a datasheet of information about it. Although much of the descriptive (how to find it) data is outdated, the surviving markers remain vitally important to the conduct of our nation's commerce.

## Why am I here? What do I want to do?

I want to find the benchmark! Professional surveyors may use some marks on a daily basis, while other marks may not have been found for over a hundred years. I enjoy the challenge of locating a survey mark that has not been found in many years. When I find a survey mark I want to take a photograph of the mark and the surrounding area; make measurements to nearby landmarks, and write a new description of how to find the mark.

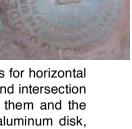
<u>I do not want to disturb your property or the mark.</u> My interest is simply to view the mark. I do not want to remove it, alter it, or otherwise cause any damage. If the mark is in an area of heavy vegetation I may ask for permission to cut it back to better access the mark. If the mark is underground I may use a metal detector and or a probe in an attempt to locate the mark. I may ask for your permission to dig for the mark if I believe I know where it is located.

## For more information:

Please visit <u>http://www.geocaching.com/mark/</u> for information about the Geocaching community. Please visit <u>http://www.ngs.noaa.gov/</u> for information on the National Geodetic Survey.

I am not affiliated with the National Geodetic Survey (the NGS). Geocaching.com is a community web site. I am a hobbyist representing only myself.









S M U A H R V K E F Y R



