Aerial Control Recommendations

TARGETS/SIGNALS:

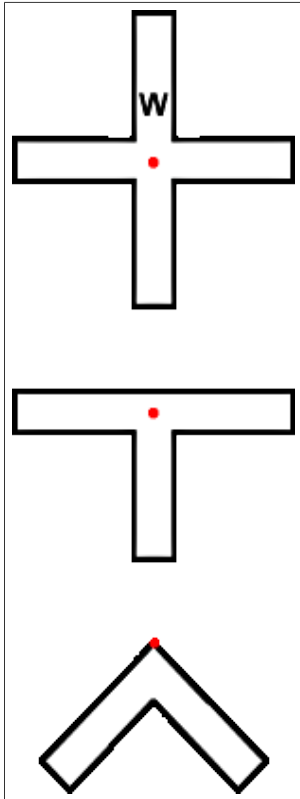Fig. 1: Aerial Targets

Pre-targeting control points is always best when possible because it ensures both a point that can be directly occupied by the survey instrument and a pre-selected location that will allow for the best geometry. A good rule of thumb when placing targets is to make the leg length about 3-4 times longer than the width (W). The signal should be centered over the control point, flush with the ground. The actual ground elevation should be reported regardless of where the pin is in relation to the surface. Where necessary, a "T" can be used instead of a cross by eliminating one of the legs. M.A.N. does not recommend placing signals in the shape of chevrons, but if it cannot be avoided, the control point should always be located at the tip.

Approximate Aerial Signal Sizes

Map Scale (ft/in)	Probable Photo Scale (ft/in)	Width (W) of leg (feet)
20-50	200-400	1.00
50-100	400-600	1.50
100-200	600-1000	2.00
200	1000-1500	2.50
400	1500-2000	3.00

PHOTO IDENTIFIABLE:

When pre-targeting is not an option, control values must be obtained on locations that can be readily identified and precisely measured in the stereo instrument. These locations will be identified and described on a control photo (See Figure 2).
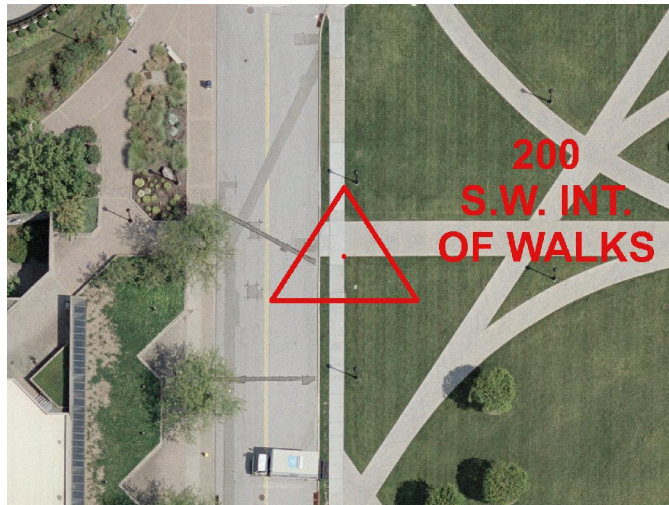

Fig. 2: Example of a photo-identifiable control point

Control points will also be marked with a pin prick so that anyone in the field can get a better idea of the exact location by holding the photo up to the light and observing with a magnifying glass. It is the surveyor's responsibility to record the point in the described location in order to avoid delays caused by mis-identification. When the situation on site makes it impossible to get the exact point requested, the field crew may need to call M.A.N. for alternate locations; or if that is not possible, record multiple similar points as near as possible to the original. Any relocation of points should be clearly indicated and described in detail on the control photos.

After mapping limits are verified, the control should be saved as an ASCII file in the following format: Point Number, Northing, Easting, Elevation, Description. Please send a disc of the ASCII file or **email it to M.A.N. Mapping**.

Please note that work cannot start on a project until the control photos are returned.