#### Sec. 20-300b-11. Classes of accuracy

(a) All surveys prepared in metric format shall use: 1 meter = 3.28083333 U.S. Survey feet.

#### (b) Horizontal Accuracy

Each survey depicting horizontal locations shall conform to a Horizontal Accuracy Class the tolerance of which is defined as follows:

Class	Positional			Linear	Angular
		Feet	Meters	(Use the ratio for D>)	
AA	1:15,000	±0.01'	$\pm .003 m$	(1:22,500 @D>225'(69m))	$\pm 8$ "
A-1	1:10,000	±0.01'	$\pm .003 m$	(1:15,000 @D>150'(46m))	±10"
A-2	1:5,000	$\pm 0.02'$	$\pm .006m$	(1:7,500 @D>150'(46m))	±20"
В	1:1,000	±0.5'	$\pm .15m$	(1:1,500 @D>750'(229m))	±2'
С	±2'	±2'	±.6m		±30'
D	compilation of existing data-NOT A FIELD SURVEY				

Linear accuracies expressed as "±"apply to distances less than (<) those prescribed as a ratio.

### (c) Vertical Accuracy

Each survey depicting vertical location shall conform to a Vertical Accuracy Class the tolerance of which is defined as follows:

	Level Loop C Than C	losure Greater Dne Mile	Level Loop Closure Less Than One Mile	
Class	Feet	Meters	Feet	Meters
V-1	$\pm .02\sqrt{M}$	$\pm .005\sqrt{K}$	$\pm .006\sqrt{N}$	$\pm .002\sqrt{N}$
V-2	$\pm .035 \sqrt{M}$	$\pm .008\sqrt{\mathrm{K}}$	$\pm .010\sqrt{N}$	$\pm .003 \sqrt{N}$
V-3	$\pm .05\sqrt{M}$	$\pm .012\sqrt{K}$	$\pm .020\sqrt{N}$	$\pm .006 \sqrt{N}$

M or K = The length of the level loop in miles/kilometers

N = The number of instrument setups in the level loop

#### (d) Topographic Survey Accuracy

Each Topographic Survey shall conform to a Topographic Accuracy Class the tolerance of which is defined as follows:

Class	Horizontal Position	1	<b>Contour Interval Test</b>	
	Feet	Meters		
T-1	$^{1}/_{40}$ of map scale	<sup>1</sup> / <sub>1500</sub> of map scale	90% within $\frac{1}{2}$ contour interval	
T-2	$^{1}/_{40}$ of map scale	$^{1/}_{1500}$ of map scale	80% within $\frac{1}{2}$ contour interval	

T-3 This class of topographic map applies to photogrammetric maps for which the surveyor provides the horizontal and vertical control. Refer to the "National Map Standards for Photogrammetric Mapping" for requirements.

T-D This class of map standard applies to a topographic map compiled from various

# Class Horizontal Position Feet Meters

## **Contour Interval Test**

sources of information not necessarily verified by the surveyor.

In using Topographic Accuracy Class T-1 or T-2, the surveyor is expressing confidence that should a test profile be run in the field, a plotted comparison with a profile scaled from the map shall be in agreement within the above criteria and the remainder shall be within the contour interval.

(Adopted effective June 21, 1996)