

BUREAU OF LAND MANAGEMENT

Irregular Boundary Adjustments

With Jim Claflin

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CADASTRAL SURVEY

Irregular Boundary Adjustments

One point of emphasis in this edition of the Manual is the application of irregular boundary adjustment. Here to explain that is Jim Clafin.

Well in this segment we are going to look at the irregular boundary adjustments. It is described in this edition of the Manual at Chapter 7, Section 50. The irregular boundary adjustment has been used by cadastral for quite a few years but it was kind of hidden in the old Manual, the 1973 Manual towards the end of Chapter 5.

In this edition of the Manual, it is going to be described quite well and be easy to find. So what is it? Let's look at the slide and see what this irregular boundary adjustment is. It is a modified form of single proportionate measurement used in restoring certain lost corners. The point we want to make here is that it is not the same as the compass rule. Many times the results of a compass rule adjustment seem to be approximately the same as an irregular boundary adjustment.

So the irregular boundary adjustment, when do I use it? First of all in resurveying resurveys. As we enter the next century, we will spend as surveyors a lot of time resurveying resurveys. Multiple records, irregular township boundaries, you may have a township boundary where a half of mile has been retraced and then you have the original record, and you have mixed records and you need to restore those corners along that line. Great opportunity to use the irregular boundary adjustment.

Restoring private survey records, a lot of private survey records out there, county survey records, old county road surveys which may go six miles along a section line or along range lines. A great tool when trying to restore that record. Completion surveys, you have surveys that close into previously surveyed areas, a good time to use the irregular boundary adjustment. And also when you run into retracement surveys on the old record.

In this next slide, we talk about why do I use it? Why do I have to use the irregular boundary adjustment and not the compass rule adjustment? It is method to deal with the material departure from the basic original survey rules. You want to follow the footsteps. You want to place those corners back where they were found by some other resurvey. And you want to restore the survey record.

In this edition of the Manual under Figure 7-10 we have placed an example problem of an irregular boundary adjustment for your use and for you to work through it. I would like to call to your attention the need to pay attention to the record versus the retraced because when you do this adjustment, you are going to want to change the courses in the direction of the retraced.

As you can see, in this example, this was basically a North and West direction. When the resurveyor retraced it, it ended up being in a North and East direction, so pay attention to the direction that you are going when you make these adjustments.

So in summary the irregular boundary adjustment is used to resurvey resurveys. It can also be used to restore private survey records which you may have encountered during your resurvey. Completion surveys or mixed records. Chapter 7 of the Manual is where you will find the information on the irregular boundary adjustments.

