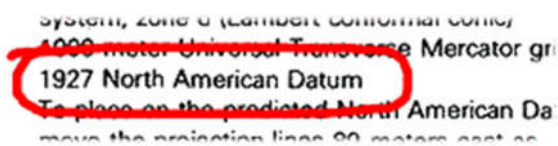


How do I use UTM?

Some instructions never seems to make sense until you actually try to do them. This FAQ is one of those things. Simply reading without trying the exercise may be confusing.

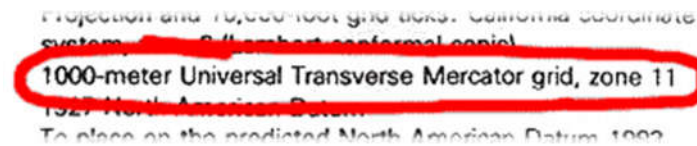
Here are a couple rules you must follow before you attempt to use UTM.

1. Make sure that everyone is using the same datum. Common datums include NAD27 CONUS, NAD83 and WGS80. Make sure everyone is using the same datum that is marked on your map. To check the datum on a U.S. Geological Survey map, look in the lower-left corner.



system, zone 8 (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid
1927 North American Datum
To place on the predicted North American Da
move the projection lines 90 meters east of

2. Make sure that everyone is using the correct UTM zone. Otherwise, your position will be about 350 miles off. This is usually not a problem unless someone is using a GPS that was previously used in a different state.



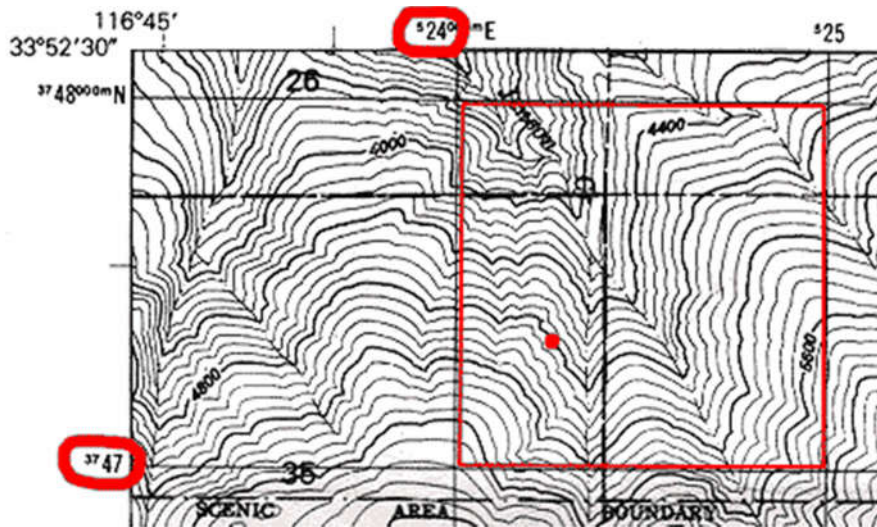
projection and 10,000-foot grid ticks. California coordinate
system, zone 11 (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 11
1927 North American Datum
To place on the predicted North American Datum 1983

Note: When you are using a GPS, you will probably see the zone letter next to the zone. Ignore this.

For example: in zone **11S**, the '11' is the most important part. The 'S' will automatically change when you enter your Northing position.

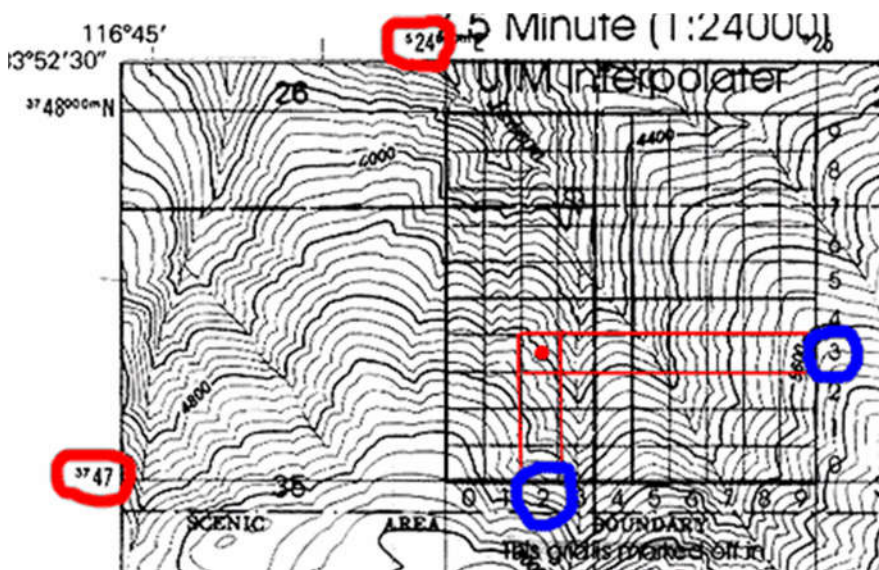
Now that we are all on the same sheet of music, let's try an exercises.

1. Gather your map and [interpolator](#) .
2. Mark any position on your map.



3. Note which 1000 meter grid your mark is in. Ours is in **524000**, **3747000**. Note that the Easting number is always read first, then the Northing. Also note that two digits are large and the rest are small. This makes it easier to read.

4. Now lay your [interpolator](#) over your map.



5. Note which 100 meter square your mark is in. Add that to your coordinates from step 3. Ours is in **524200**, **3747300**.

6. For a little more accuracy, you can estimate the position within the square to the nearest 10 meters. For example: our mark appears to be halfway past the 100 meter markers. The result would be **524250**, **3747350**.

7. Although you probably won't read the entire UTM position, remember that when you are recording your information for later use, it is not complete without the grid and datum. Our final coordinate is **11S 524250, 3747350 NAD27 CONUS**. It looks confusing but, as you just learned, it's rather simple. You may have noticed that many of our [mission summaries](#) contain the UTM information in this format.

8. There is a way of reading UTM in a short format. In order to lessen the chance of mistakes being made by tired rescue members, RMRU does not use this format. It also rounds your position off to the nearest 100 meters, which is usually not accurate enough for rescue work. However, you may find someone who does and would like to know what they are talking about.

To shorten the UTM coordinate simply take the middle three digits of each number and combine them. You must realize that there is actually a zero in front of the Easting. Our coordinate of **0524250, 3747350** becomes **242473**. I guess some people found the UTM too simple and wanted to make it more difficult.

Related FAQs: [What is UTM?](#)

[When should I use UTM instead of LAT/LON?](#)