## March 28, 1964 Gulf of Alaska Tsunami

| Date (UTC)     | Time (UTC) | Source Location | Magnitude | Source Type               | Maximum Runup (m) | Fatalities |
|----------------|------------|-----------------|-----------|---------------------------|-------------------|------------|
| March 28, 1964 | 03:36:14   | 61.05N 147.48W  | 9.2 Mw    | Earthquake and Landslides | 67.1              | 122        |

## Let's calculate an approximate travel time from Seward, Alaska to 3 locations:







Valparaiso Chile

Brisbane, Australia

and Victoria, British Columbia

You can use the website <a href="http://www.timeanddate.com/worldclock/distance.html">http://www.timeanddate.com/worldclock/distance.html</a> to calculate approximate distances to cities near these locations. For example Seward is very near Anchorage, Alaska.

## Then: Fill in the following chart:

|                     | Average Ocean depth (m) | Average wave speed (m/s)        | Average Wave<br>Speed (km/hr) | Distance (km) | Approximate Travel<br>Time (hrs) |
|---------------------|-------------------------|---------------------------------|-------------------------------|---------------|----------------------------------|
|                     |                         | $= \sqrt{(9.81 \text{*depth})}$ | =(m/s)*3600/1000              |               | Time = distance/speed            |
| Seward - Valparaiso |                         |                                 |                               |               |                                  |
| Seward - Brisbane   |                         |                                 |                               |               |                                  |
| Seward - Victoria   |                         |                                 |                               |               |                                  |



