

Crew,

Your spacecraft has run out of fuel and you've lost your CNS (Cosmic Navigation System). Fortunately for you, you still have working antenna and you know of three satellites in your vicinity that you can ping. You send a signal to each of the satellites and listen for a reply. Each dot on this grid is separated by 1 light second. When you send a ping, it takes the satellite 7 seconds to process and send its response. Here are the total round trip times for each successful ping.

γ - 25 seconds

π - 17 seconds

σ - 33 seconds

Once you have found your location there is a little bit of encoding you must do so that your spacecraft computer core can make sense of it. It's time for you to get a peek behind how these puzzles are built.

1. Transform each letter into Morse Code. Ex: A = $\cdot - \cdot \cdot$
2. Combine all the Morse Code into one string.
3. Transform the Morse Code into binary. Ex: $\cdot - \cdot \cdot = 0100$
4. Change the binary into base ten. Ex: $0100 = 4$
5. Input this value directly into your ship's core.

Attached is a section of your travel grid containing the location of the satellites and several possible locations for your craft.

Attachment 1.A: Chart A, Section 4, Grid 0100

