CS4414. In class assignment: estimate what is feasible.

Your are recruited by the US Navy to help them choose an appropriate laptop to be used in field studies. The details are obviously classified, but you know that quick assessment of a material's mechanical properties will be made using Z-ray technology (the gadget transmits measurements virtually instantly to the laptop). The test brigade will have 24 hrs to make an assessment; its computation-heavy part will involve solving a linear system $Ax = b$, where A is a non-sparse NxN matrix. So, your goal is to help the Navy select a laptop that can handle the largest N matrix in 24 hrs, using Mathematica's LinearSolve[] with all default settings. Problem is, there are many vendors to choose from, so, realistically, you can only spend 15 mins or so with a laptop, then need to move to a different vendor.