

January 19 – January 31

- Researched wind forces and how wind speed increases with elevation.
- Studied lateral forces, oscillation, and sway in tall structures.
- Began case study research on the Burj Khalifa.
- Recorded structural design features such as the buttressed core system.
- Performed initial stress calculations for hypothetical taller buildings.

February 1 – February 14

- Continued calculations for 1,500 m and 2,000 m buildings.
- Compared calculated stress values to known material limits.
- Found out about and researched the X-Seed 4000 concept and analyzed its proposed height and design.
- Investigated projected wind sway for multi-kilometer structures.
- Began researching elevator system limitations in supertall buildings.

February 25 – March 3

- Created graphs showing stress vs height and wind sway vs height.
- Analyzed how elevator shaft space increases as height increases.
- Organized research into structural, environmental, and practical limitation sections.
- Wrote a conclusion summarizing general topics

Not a very in depth logbook but it is fully true apart from the little stuff we did in the gaps.

(YASIR ISMAIL AND ALI SHEFET)

