# Testing that the connection between drone and phone works (for different versions of Wi-Fi)

1. Decide on a set of Wi-Fi versions, covering the common ones
2. Connect to the drone and to the internet, using all available phones (group members probably have some variation in what phones they have, this might let us catch an error that only occurs with a certain type of phone)
3. After connecting, attempt to do the following:

* Load a webpage (agree on one page for everyone to test)
* Send an e-mail

1. In case anything fails, investigate.

# Measuring the bandwidth both from the drone and from a client

1. Send a file of predetermined size (preferably 1-2 Gigabyte) and measure the time it takes. We use a big file to reduce the margin of error (decreases the influence of temporary fluctuations and makes the time measurement more accurate).
2. Send the file over the internet to test the total bandwidth of the drone.
3. Send the file during multiple tries with various conditions including:

* Different distances (three distances should be enough, we test distances more during the signal strength testing)
* Other Wi-Fi networks nearby (to test for the effects of interference)
* Using different clients (phones) to send and receive the file

# Test the signal strength from different distances and angles

1. The strength will be tested by using the Xirrus Wi-Fi Inspector program (free software, reviews says it's reputable and decently accurate).
2. Test the strength from five different distances (the furthest distance should be when the contact is so unstable transmissions hardly work).
3. Test the strength from eight different angles, separated by 45 degrees.
4. Test with different distances in a few of these angels to see if there is a difference.
5. Test the strength when the drone is higher than the user, testing with at least three different heights.