

Ground Station

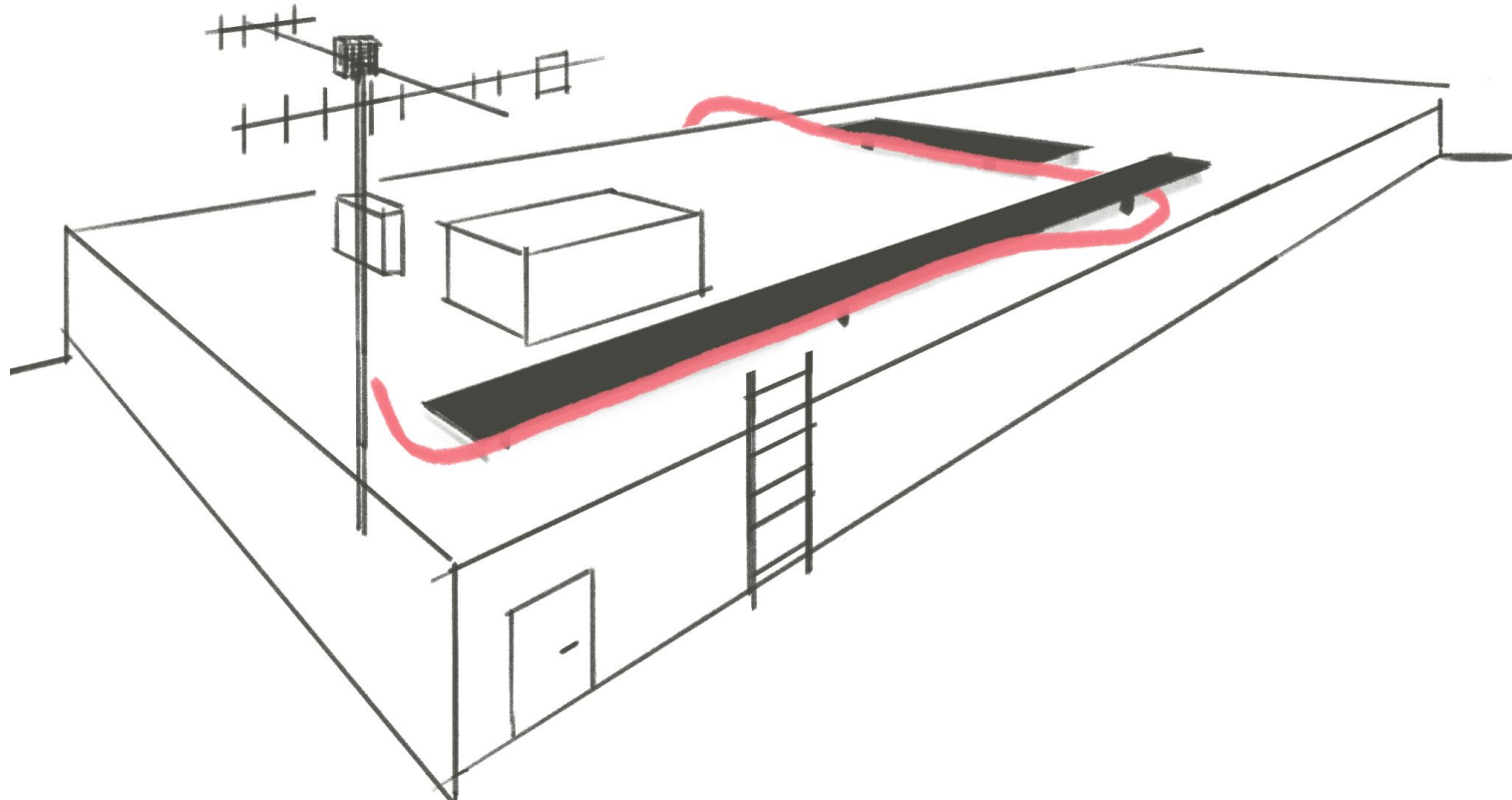
Mid-Semester Meeting, Spring 2025

The work on the roof is now finished!
But there are some issues to be
resolved.



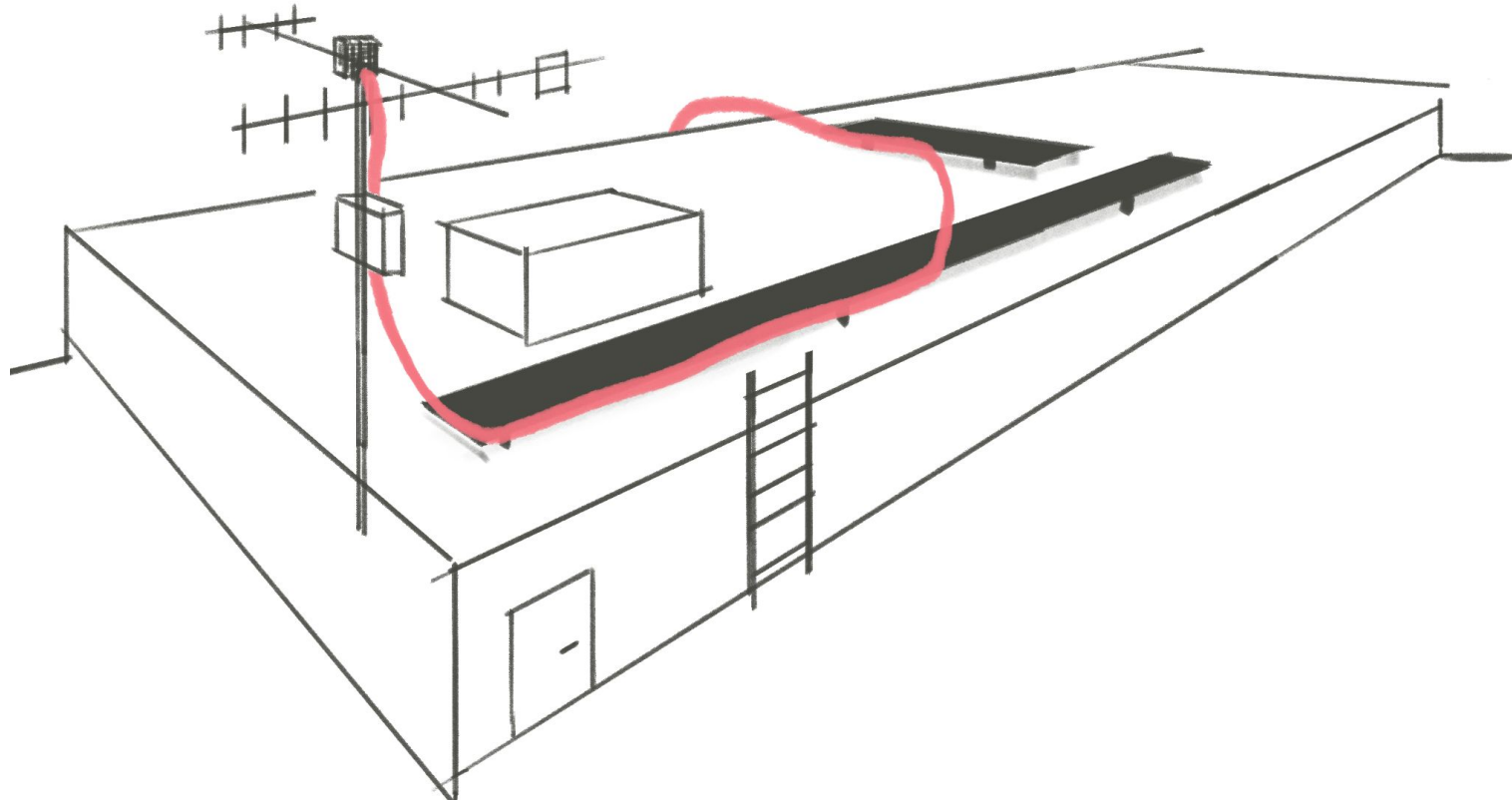
Issue #1.

The cables are too short to be mounted on the new roof bridge.
Does not reach the antenna.



Temporary solution

We disconnected the cable chain from the bridge and put it along a “shortcut” (resting on the tar paper).



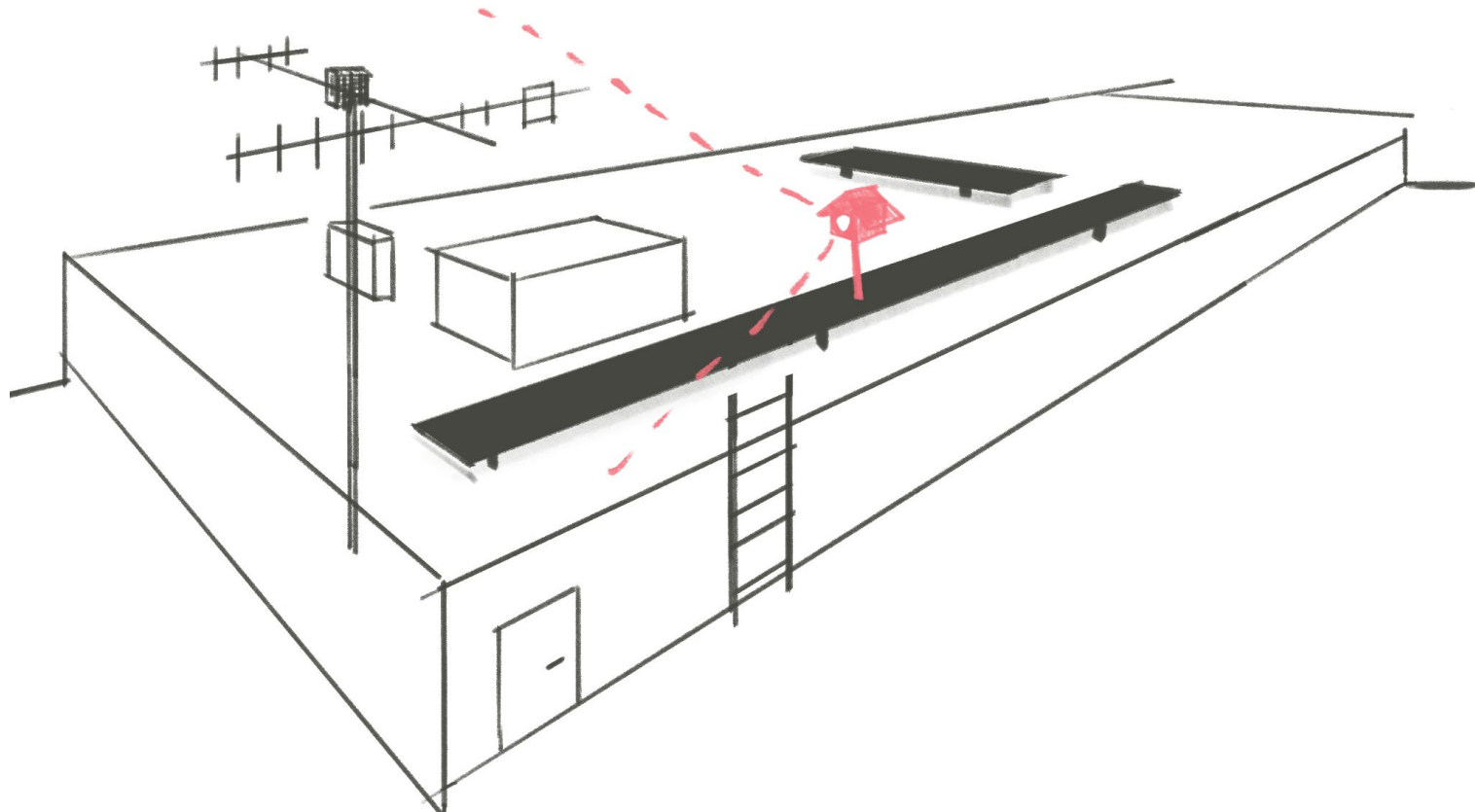
Issue #2

The protective PVC tube had fallen off one of the connectors. It was thus soaked in water and needs to be dried off before voltage is applied



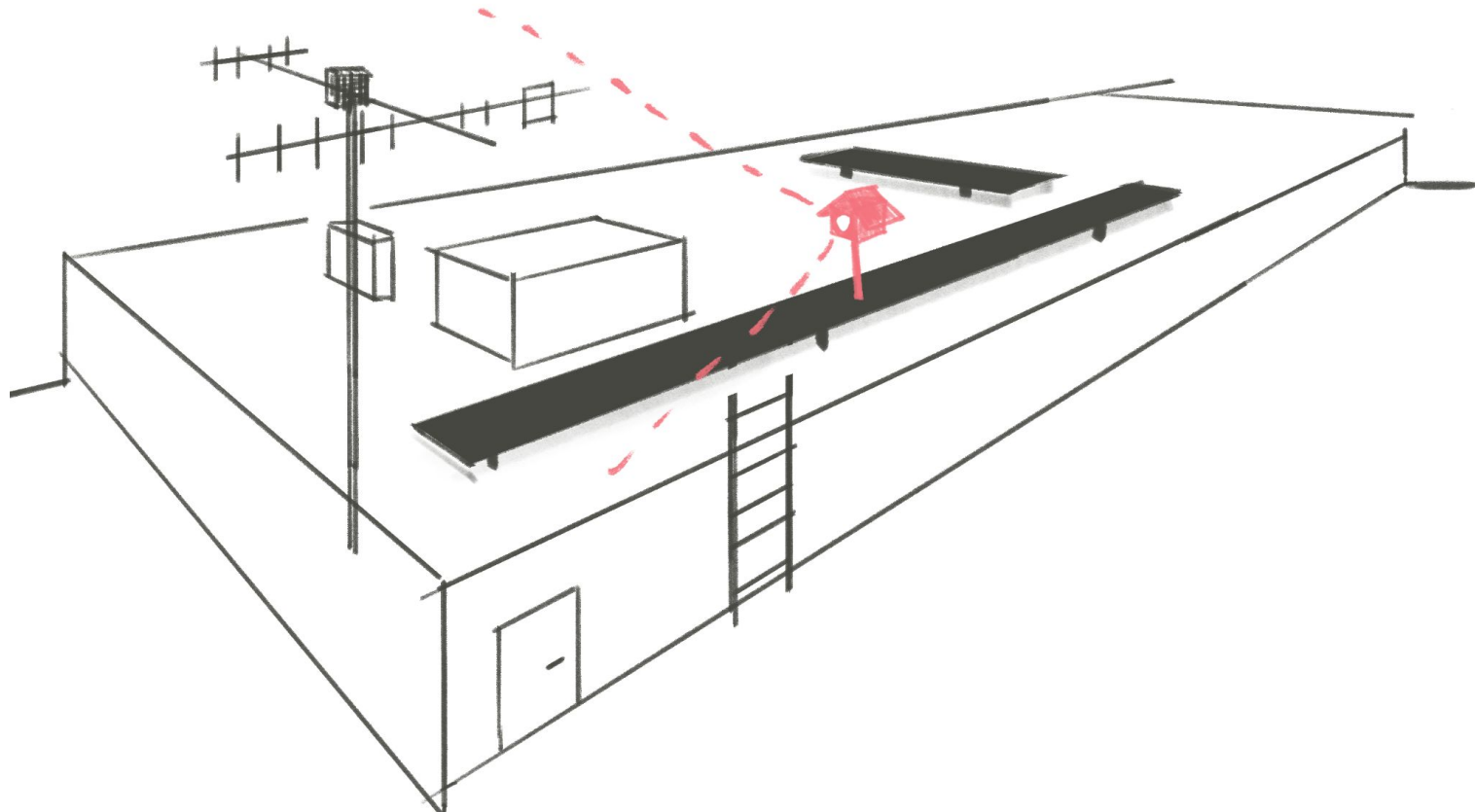
Issue #3

The box on which the camera was mounted has been removed.



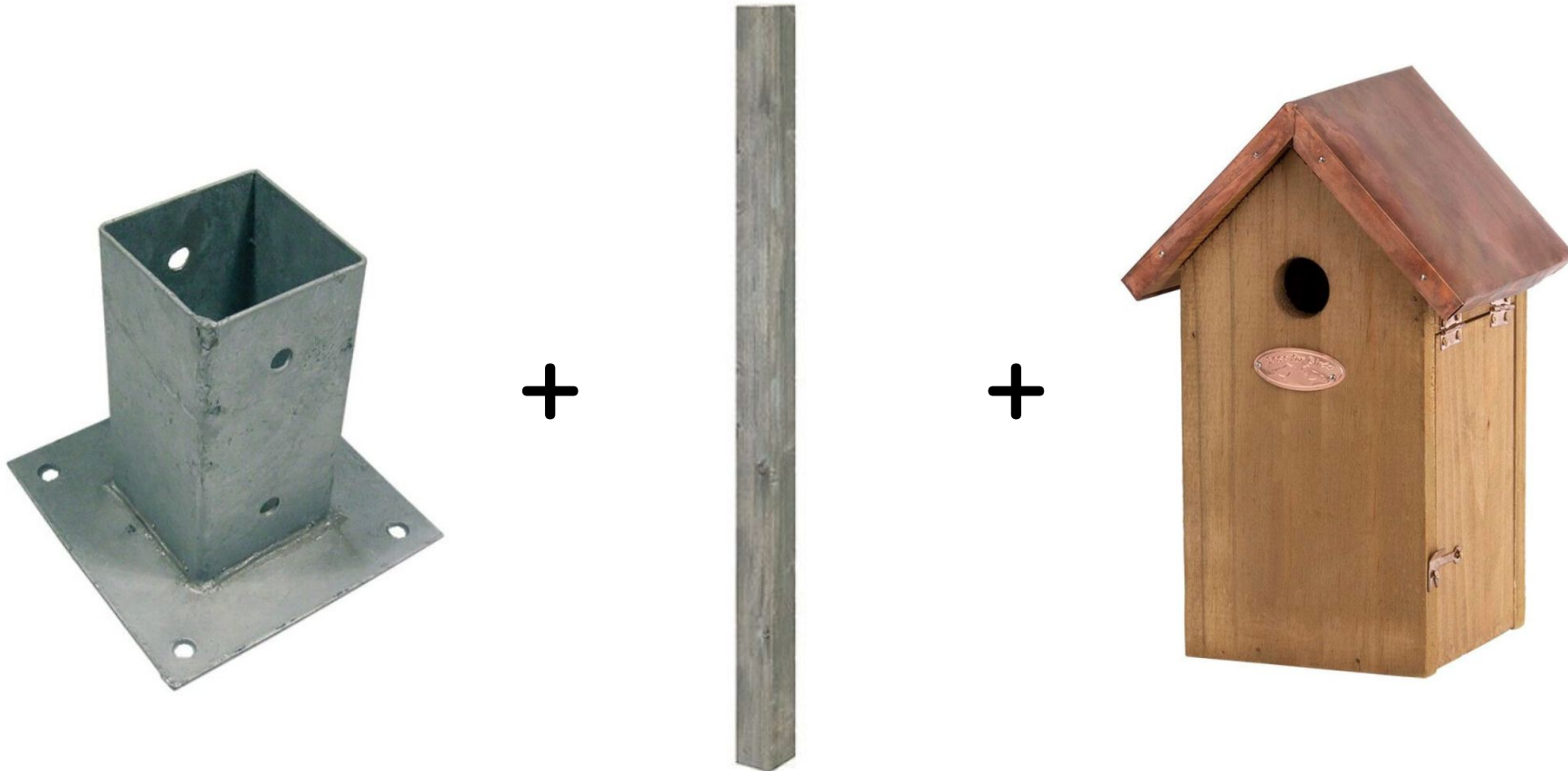
Suggested solution

Put the camera on a pole mounted on the roof bridge.



Suggested solution

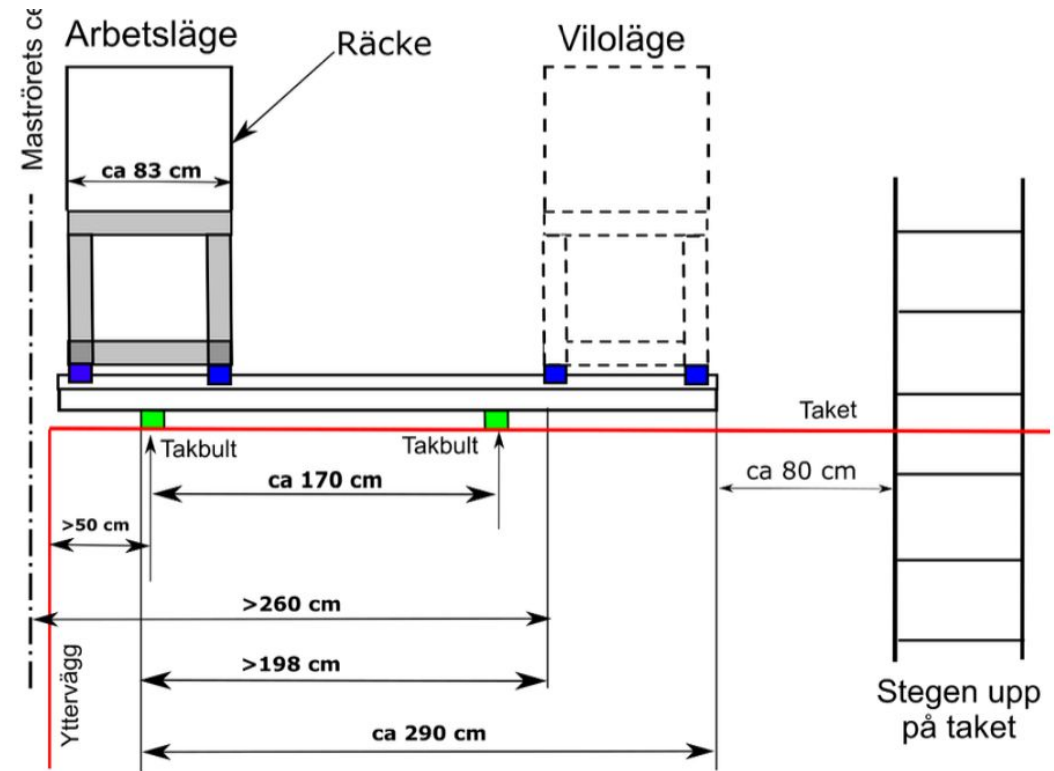
Perhaps using something like this?



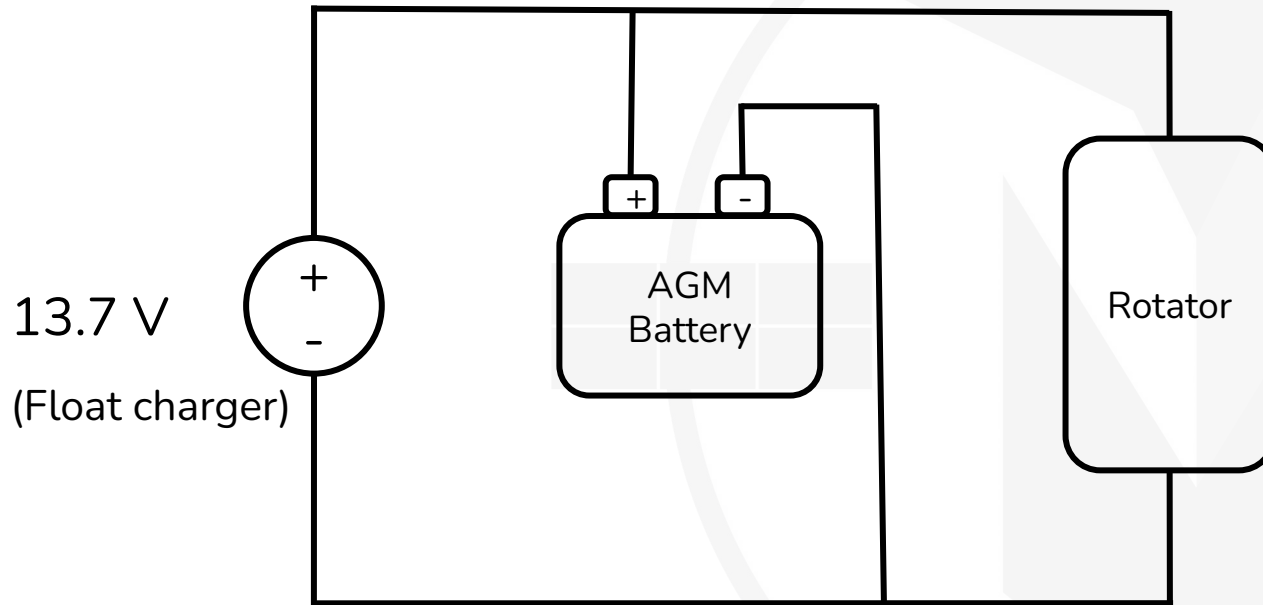
New Working Platform:

In conjunction with roof work it was also demanded that we replace the working platform on the roof.

- Sven has been working tirelessly on a new design.
- Still needs to be iterated with Akademiska Hus.
- We need to take measurements of the antenna



Suggested Solution:



Bill of Materials:

Battery:

- 20 AH VRLA AGM 12V (599 sek)

Charger:

- CTEK MXS 7.0 12V/7A (1 395 SEK)

Suggested Solution:

Bill of Materials:

Idea has been run by and
certified by power electronics
lab director Patrik Janus

13.7 V
(Float charger)



AGM
Battery

Rotator



Battery:

20 AH/PLA AGM 12V (599 sek)

Charger:

- CTEK MXS 7.0 12V/7A (1 395 SEK)

Evaluation of Semester Goals:

- Reconnect everything and put the GS online again.
- Long term tracking using Valentina can begin as soon as the GS is up and running again.
- Rehearsal comms deployment test before the end of semester meeting.

Semester Goals:

- Reconnect everything and put the GS online again.
- Long term tracking using Valentina can begin as soon as the GS is up and running again.
- Rehearsal comms deployment test before the end of semester meeting.

Short Term Goals:

1. Dry out the wet connector.
2. Power everything up.
3. Take physical measurements of antenna to facilitate Sven's design of the new platform.