

# Waqar

## Previously

Connect manometer to fridge and test (all piping and backup unit should be ready)

Both PS run in counting house and hall by just moving PS everything plug and play (two tubes, two EIP, 4 connector boxes,...)

Roots circulation test (run system long term and monitor sensors and flows and roots system)

Arrange cables so they are together in bundles and not laying on top of magnet (make very organized and clear with all leads out of the way and off of the magnet as much as possible)

Test LN2 level probe at PLC and Test LHe level probe at PLC

## Newer

All valves and sensors to PLC (all pneumatics and sensor connected to PLC and are tested and reading out, ORCs or whatever we need to use, then we do helium circulation through valves)

Prepare backup cables of devices in penetrations (all cables in penetrations have backups. For the ones that are home made we make a least one additional and have it in place)

Any ORCs that remain or could be asked of us we must get out of the way (Anything you can imagine that Rick or FNAL will ask us to do ORC for lets do it)

Fridge electronics: Install eight chip resistors and target insert sensors as well as annealing plates and sensors (Fridge arrives very soon)

Arrange QT modem inside PLC cabinet (Put this setup nearly inside PLC so it is not visible from outside)

Order and setup new purity meter: make it just like the one we have from QT, need valves, tubing, flow rotometer, and meter

Finish microwave PS swap-out connects for counting house and hall (same as above but we test by move each PS back and forth with no problems. Also need interlock for one in counting house if tube gets too hot)

Setup microwave test bench for how Vibodha wants it (he will use this area once you are gone so help him set it up for what he is doing)

Shim PS install remote relay and test (need to make sure this is reliable)

Label all cables through each penetration on both sides and take photos

Run roots and check monitoring system long term then full circulation test

Setup secondary turbo with controller on magnet vacuum (need cable installed)

Make two more q-meter boxes all with water cooling (add to one we have too)

Setup back UVA NMR rack (copy system we have)

Think yourself about all electrical systems vulnerabilities and help us to prepare