

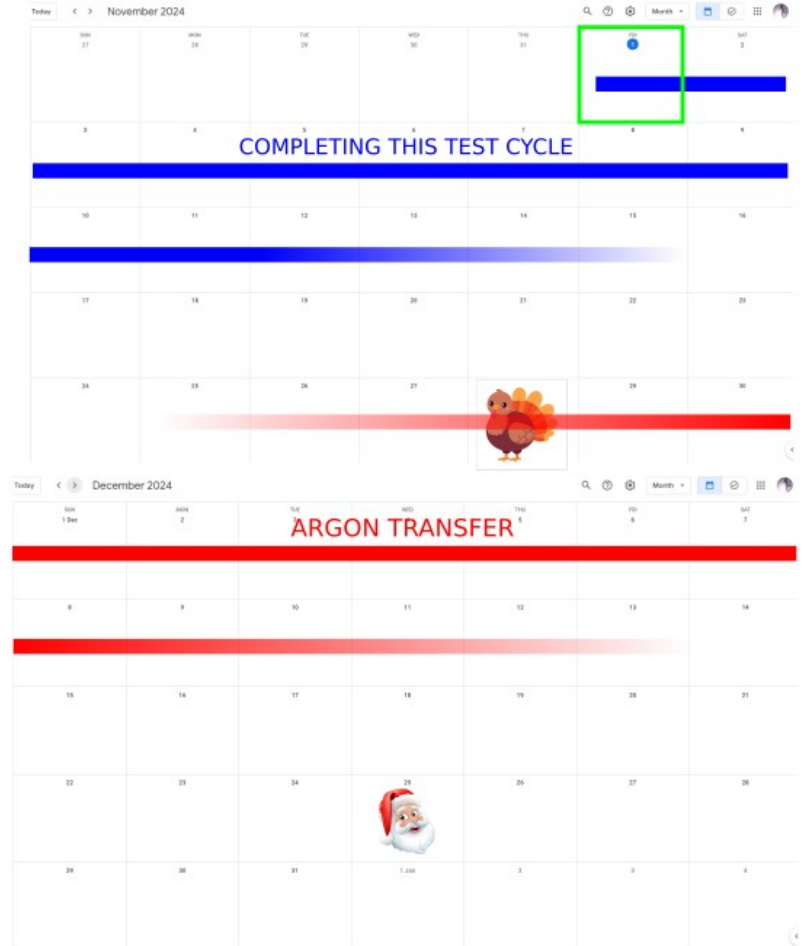
Future Test Activities

Current Schedule

- We expect to have APA15 out of the cold box, and both APAs hanging protected in the clean room by Nov 15th. **That is the end of our definite schedule of activities.**
- Beyond Nov 15th we have **no consortium cold test presence at CERN** (and beyond Nov 11th, only me).
- The NP04 → NP02 argon transfer (which will exclude workers from the clean room for 2 weeks) is still scheduled for the week of **Nov 25th**. This will be contingent on the success of the NP02 beam plug tests.

Available Time

Our remaining time in this calendar year is limited. If the Ar transfer goes ahead, we have only 2-3 working weeks remaining beyond the end of the current work.



Retesting APA14

Activity	Time	People
Remove broken wire	1 week?	Factory experts
Remove electronics	~0.5 weeks	CE experts
DWA test (vertical in clean room)	1 week	DWA experts
Replace electronics	1 week	CE + C/R experts
Re-insert APA14 into cold box and reconnect electronics	1 week	CE experts, APA manipulators
Cold cycle	1 week	CERN cryo staff
Extract APA and remove electronics	1 week	APA manipulators, CE experts
Repackage both APAs and extract to ASF	1 week	Factory experts, APA manipulators
DWA test (horizontal in ASF)	1 week	DWA experts

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SKIPPABLE?

Turnaround vs. Value

- We can turn this test around faster by skipping
 - DWA measurements
 - Electrical instrumentation
- Skipping DWA measurements means we cannot tell whether any observed tension change after the 2nd cold cycle is a cumulative effect.
- Skipping electrical instrumentation means no monitoring of wire status while the cold box is active.
- A purely mechanical test, in my opinion, has little value. Even if we do observe more wires break, we will not know their tension before they broke, or the time or temperature at which they broke.

Summary

- To retest APA14 will take 4–6 working weeks, depending on whether we want to skip any steps.
- The first item on the critical path is a new operation at CERN, which will require Daresbury staff to obtain training and submit a procedure.
- It will also require the recall of experts.
 - US experts (e.g. cold electronics) require 1 months' notice to submit travel.
- We have 2–3 working weeks left in this calendar year in which the NP04 clean room is guaranteed to be accessible.