

# UPDATES

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# UPDATES & ANNOUNCEMENTS

- Link to Target Electronics ORCs  
<https://confluence.its.virginia.edu/display/twist/Target+Electronics+ORCs>  
NMR ORC: working on two separate ORCs (custom-made components, commercial components).
- Uni. of Pavia group: Sivers cross-section generator will be delayed.
- Continue working on our “Sivers extraction (with Neural Network)” code [Me, Dustin, Nick, Devin] (A proceedings paper in progress).
- TMD Monthly Seminar: **May 25<sup>th</sup> 2:30pm-3:30pm CT** (3:30pm-4:30pm ET) Alexei Prokudin  
Past slides: <https://confluence.its.virginia.edu/display/twist/Seminars>
- Received quote from KC electronics on NMR (long) cables, waiting for Teledyne quote for a reel of 75ft with connectors separately (check standard size 100ft, Kun will also buy reel : check).
- Please check <https://confluence.its.virginia.edu/display/twist/To-do+list+at+NM4> page for the updates on ongoing/scheduled tasks at NM4
- Receiving items: Please take a picture(s) if you find an item received for our group, and then keep it on the “receiving table” (if that’s an item that you haven’t requested)  
This will be easier for me to keep track of the items that we order (Thank you!)

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## [Update from Rick]

Stainless steel pipes (pipes are on unit strut pipe racks) are now installed with compression fittings on their ends (ready for other things + following)

- to connect for the backfill Helium
- for the high purity Helium going to the QT system

## [Requests from Rick]

1) There are two valves on each of the Dewars (There are manila tags on the Neck of the dewars), when the cold box is to be installed on top of the Dewars, one valve has to be removed because in the way, and then needs to be re-installed after the cold box is in place.

2) There are two relief valves attached to the Dewars sent from QT, they don't have labels at the moment, and need to be labeled relative to the Piping & Instrumentation Diagram (P&ID).

# SCHEDULE TASKS (COMING UP SOON / CURRENT)

Item	Item description	Assign.	Time Frame	Comments
205/	Fridge modification and installation	Dustin		Waiting for quotes 304
	Fabricate 3 <sup>rd</sup> part of the He quench line		Started 1 ½ months ago ~ 03/01/2021	Completed
218	Fabricate He manifold parts (He recovery manifold)		04/21/2021-05/26/2021	Submitted 04/21 Ongoing (25% done)
224	Install quench line supports (anchor points)		04/21/2021-04/29/2021	Meeting happened Moving slowly (2-3 w)
225	Install He quench line	PPD	04/29/2021-05/07/2021	
226	Install N2 vent line	PPD	05/10/2021-05/10/2021	Making progress
227	Install manifold in NM4		04/09/2021-04/13/2021	Pred. 218
78	Procure parts for gHe cooldown line (QT-QT)	Rick	03/10/2021-04/13/2021	100% done
79,80	gHe line installation & He cooldown line installation (QT)	Rick	05/12/2021-05/25/2021	Following up (moving along)
229	He safety relief vent line	PPD	05/11/2021-05/11/2021	Fermilab will connect it with a manifold

# SCHEDULE TASKS (COMING UP SOON / CURRENT)

Item #	Item description	Assigned	Time Frame	Comments
(147)	QT Transfer line installed and tested (make transfer and check efficiency)		Est 2 <sup>nd</sup> week of May [Pred. LN2 installation]	In a box right now, waiting until other piping (I think it's ready to do)
143	Setup controls and remote monitoring		Started this week Need electrical ORC	Need to install PLC software
260	Magnet Rack ORC	Zulkaida		Submitted on 04/22/2021
	Magnet rack: Test every device	Zulkaida	Once ORC is approved	Dustin and Waqar will check
	Magnet Rack cabling (check all units)	Zulkaida		
238	NMR ORC	Ishara		Submitted on 04/22/2021 (in revision)
	<del>Microwave: Getting a platform</del>	<del>Waqar</del>		<del>Need to find a platform</del>
264	Setup baratrons	Anchit	04/26/2021-05/03	Cable was ordered
265	Calibrate and test baratrons	Anchit	05/03/2021-05/10	
	Connecting baratrons	Anchit		

# SCHEDULE TASKS (COMING UP SOON / CURRENT)

Item	Item description	Assigned	Time Frame	Comments
245	Actuator ORC	Vibodha		Control box: Submitted last friday
	Installation of cables from SCR	Waqar		One conduit needs to be installed. Waiting for a block diagram from Zulkaida
	Critical cabling from East side	Dustin		
	Shell pressure test and install with nose	Anchit		Sent it to UVA
	Vacuum-target beam line (centered and re-leak checked using designated turbo system)		Above item is the predecessor for this	
	Magnet and Vacuum insulation approved to run			
	Preliminary cooldown to test Magnet coils		Towards end of May	
	Cave ODH construction complete and approved			6