

LAr R&D Progress Updates

09/10/26

Yichen

Lab Safety and Space Management

- Invited to the “Effectiveness of Training Processes Assessment for C-AD, EIC & Physics” Interview for next Wednesday
 - Trying to turn down the interview because I’m traveling to Duluth, MN next week
- For PIs, the Effectiveness of Training review will mainly focus on whether:
 - They complete all required training before starting work.
 - They assign appropriate training to users working in their respective laboratories.
 - They brief users on the applicable requirements and verify that their required training is current before and during the work.

Purchase Budget plan for FY 26 end purchase

Current plan: \$12,358.18

Target: \$12,000 spent by September 30

Item	Source	Qty.	Price	Consideration	Note
EJ-286-WLS plate	Eljen Technology	5 plates	\$2,075.00	Committed spending	Vendor will process the credit card first
Optical components	Thorlabs cart 4UUA003Q2LFU	Cart	\$2,487.46	Items can be adjusted	Usually ships quickly
CF signal feedthrough	Accu-Glass 25D2-450	1	\$967.00	In stock / web order	25-pin D-sub connection
DB25 to 8 x BNC cable	Newegg	1	\$155.99	Available for credit card purchase	Signal breakout cable
DB25 to bare-wire cable	Newegg	1	\$42.99	Available for credit card purchase	Signal breakout cable
Keithley 2231A-30-3	Test Equipment Depot	1	\$1,130.50	Check credit card eligibility with admin	Low-voltage triple-output supply
Broadcom AFBR-S4N66P024M	Mouser	40	\$2,571.60	In stock / credit card purchase	Off-the-shelf SiPM option
Broadcom AFBR-S4N44P014M	Newark	40	\$937.20	In stock / credit card purchase	Off-the-shelf SiPM option
NI USB-5133 DAQ	Seagulls Industrial	1	\$1,990.44	Confirm availability before purchase	Direct NI price about \$3,000
Total planned spending			\$12,358.18	\$358.18 above the \$12,000 target	

September confirmed spendings

\$9,193.63

Actual purchase costs, including reported shipping and fees

Item	Source	Qty.	Item cost	Shipping / fees	Actual total	Note
EJ-286 WLS plate	Eljen	5 pcs	\$2,075.00	—	\$2,075.00	Invoiced, CC charged
4.5 in. CF signal feedthrough	Accu-Glass	1	\$967.00	\$32.59	\$999.59	In stock, shipped out, expected Friday
DB25 to 8 × BNC cable	Newegg	1	\$155.99	—	\$155.99	In stock, shipping out tomorrow
DB25 to bare-wire cable, 10 ft	Newegg	1	\$56.98	—	\$56.98	In stock, shipped out
DB25 to bare-wire cable, 3 ft	Newegg	1	\$42.99	\$5.99 combined Newegg shipping	\$48.98	In stock, shipping out tomorrow
Broadcom AFBR-S4N66P024M SiPM, 1x2	Mouser	40	\$2,571.60	—	\$2,571.60	In stock, expected tomorrow
Broadcom AFBR-S4N66P014M SiPM, 1x1	Mouser	40	\$2,099.60	\$55.39 combined Mouser shipping and fees	\$2,154.99	In stock, expected tomorrow
Keithley 2231A-30-3 DC power supply	Test Equipment Depot	1	\$1,107.89	Free	\$1,107.89	Received
Total confirmed spending			\$9,077.05	\$93.97	\$9,171.02	

Cost comparison and budget position

Comparison covers the confirmed orders listed on the preceding slide

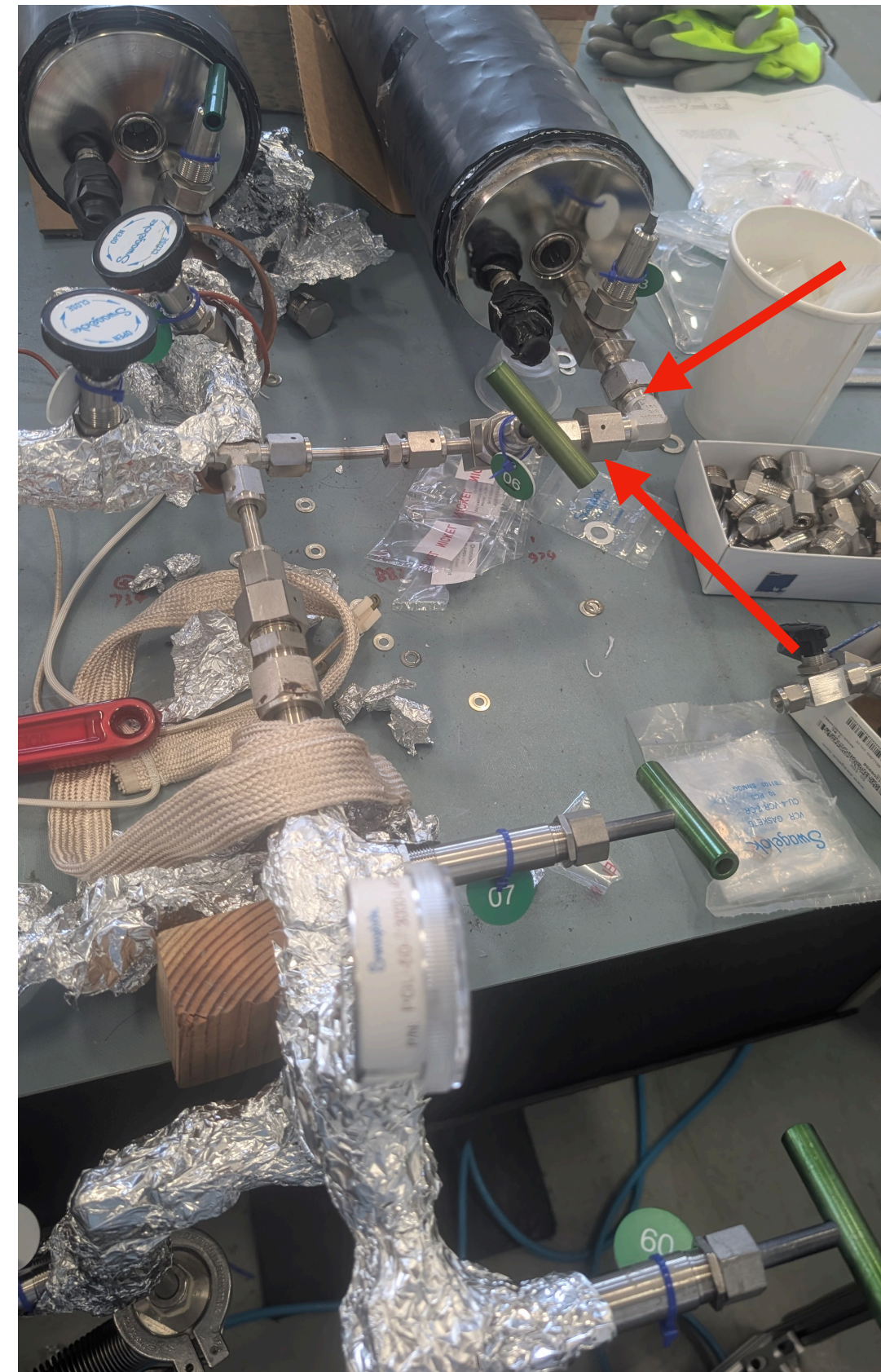
Measure	Earlier estimate	Confirmed cost	Difference
Orders now placed	\$7,880.28	\$9,171.02	\$1,290.74
September budget target	\$12,000.00	\$12,000.00	—
Remaining budget	\$4,119.72	\$2,828.98	-\$1,290.74

Main source of variance

- The 1x1 Mouser SiPM lot cost \$2,099.60 rather than the earlier \$937.20 estimate. Its price difference accounts for \$1,162.40 of the \$1,290.74 increase.
- No room for the DAQ module, the low cost option is not in stock with the vendor I found
- The rest will be spent as being planned on Thorlab optical components, est. ~\$2500 and some gaskets parts ~\$250
- All CC purchase has to be done by 9/24
- The fund spendings are fully allocated

Xenon Transfer

- Small leak found in the final check before baking
- No significant but sensible, we need $< 1 \times 10^{-9}$ mbar.l/s leak rate
- With our technicians help, the leaking fittings are located
- Replacing the gasket and



Gina's visit

- Gina is visiting high bay lab tomorrow
- Jay will guide the tour
- My trip canceled so I will be there
- I put the samples on the bench with our holders
- Recent paper printed out and will put on there as well
- Any further suggestions are welcome

