2022-2023 Projects

NCNR Sample Environment

Tanya Dax
Ongoing Projects

- **7T Dry Magnet Procurement**
  - Status and Schedule Update

- **Sample Holders**
  - Inventory and Purchases
  - Designs in Progress

- **CCR Maintenance**
  - Work in Progress
  - Status of Fleet

- **Space Management**
  - Preparation for losing space in various phases of facility upgrades through 2024.

- **Safety and Training**
  - Hazard Reviews
  - Lift Reviews
  - LabView Core 1 and Core 2 training

- **Equipment and Supplies Management**
  - Looking for a good solution
7T Dry Magnet Procurement

Design Reviewed and Approved
Long lead time components ordered
Some 12m lead times - unexpected
Schedule delayed in favor of 12T completion
Sample Holders Status

**Standard Holders Inventory**

Full inventory of all empty holders in all locations
Will be fully stocked when current orders arrive

**Barcoding**

Vanadium and copper parts done

**New Parts Designs**

Reflectometry Multi-Sample Holder – In Progress
HFBS/NSE Flat Plate Sample Holder – On Hold
HFBS Powder Capacitance Sample Holder – On Hold
Reflectometry Multi Sample Holder

- Reduce time to sample changeover
- Options with 3 - 8 sample positions
- Vacuum sealed can, evacuated offline
- Sensor and resistivity wiring feedthrough
- Design in progress
CCR Maintenance Status

New Stuff
- New HTCCR plate for 3 heaters configuration
- New SHI compressors received for TLCCRs

Vendor Service
- ARS displacers vendor service x2

Problem List
- CCR-12 Compressor electrical failure
- CCR-13 Minor damage to cold tip, still usable
- CCR-23 Occupied by Tosado apparatus
- CCR-25 Installing new heater stage
- CCR-27 Installing new heater stage
- TLCCR-5 no compressor cart
Space Management

Make Space for Storage
- Excessed old equipment
- Cleaned out trailer
- Cleaned out B-wing Mezzanine

Temporary Moveout
- OC/Magnets area in C100
- NSE Mezzanine
  - “Storage” space between NGA-B

Make Space for Work
- Shifted HB user station 18 inches to right
- Regained space in HB from RFO
- Made space in HB-Lab for work
Hazard Reviews

Manuals Edits
Review user and technician manuals for consistency, accuracy, clarity.

Glove Boxes
SOPs, User Training Manuals, etc.
Storage Options
Planning Cleanup Operations

CCRs
SOPs, User Training, Lift Documentation, etc.
New Carts Designs for old CCRs

ARS-All with new and old compressors – near completion
TLCCR-DCS with new compressor – in progress
TLCCR-NSE and HFBS non-compressor carts – not started
TLCCR-5, 6, 7 make liftable – not started

Non-Standard Lift Reviews

Janis #18-28 existing carts – near completion
All BLCCR Cold Heads – in progress
All TLCCR Cold Heads – in progress
Reflectometry CCR Harnesses – in progress
Equipment and Supplies Management

**What We Want**
- Lab Inventory Management System (LIMS)
- Equipment Maintenance System
- Beamline Event Logging
- Barcoding and Equipment Tracking
- Shared, Unified Solution
- Money

**What We Have**
- Lab Supplies Spreadsheet
- Lab Equipment Spreadsheet
- SE Equipment Spreadsheet
- Bankcard Purchases Spreadsheet
- SE Equipment Maintenance Appsheet (Google Sheets)
Questions and Suggestions?