SRF Operations All Hands Meeting

- ❑ Safety Topic
- ❑ Quality Policy
- ❑ SRF Ops Business Update
- ❑ ISO Certification Update
- ❑ ISO Processes Introduction
- ❑ Summary and Q&A

SRF Ops QMS Steering Team

- Tony Reilly
- Anne McEwen
- Jacob Harris
- Dan Gautier

Safety Topic: Hurricane/Storm Preparation

Highest Winds Reported in Virginia from Hurricanes

Gust	Dates	Location
150 mph	9/14/1944	Cape Henry
138 mph	9/12/1960	Chesapeake Light Ship
130 mph	10/15/1954	Hampton
110 mph	7/12/1996	South Island CBBT
104 mph	9/27/1985	South Island CBBT
104 mph	8/27/1998	Cape Henry
104 mph	8/17/1986	South Island CBBT
100 mph	8/18/1879	Cape Henry
100 mph	4/6-7/1889	Cape Henry
100 mph	10/15/1954	Norfolk
100 mph	9/19/1999	James River Bridge

https://www.evms.edu/media/evms_public/departments/environmental_health__safety/HurricaneGuide15_ALTmap.pdf

SRF Operations Quality Policy

Quality is our commitment to deliver world-class SRF products and services that are worthy of our customers trust by

- *Enabling and empowering our people to build safety, reliability, quality, and compliance into our products, technologies, and services*
- *Delivering products to plan that support system reliability, availability, and that yield a great customer experience*
- *Measuring our quality objectives and driving systemic continual improvement*
- *Proactively and transparently engaging our customers*

The Quality Policy is the most foundational statement for how we do business.

SRF Operations Projects – Strategic, Energy Reach and MLP

Energy Reach

- Delivered C75-01 and P1 to CEBAF
- Currently working on C50-01R, C100-09R and C75-02, all are scheduled to be installed in FY22 SAD
- Plan for (3-4) more to be completed for FY23 SAD

SNS Proton Power Upgrade - Multi-lab partnership (MLP) project with ORNL

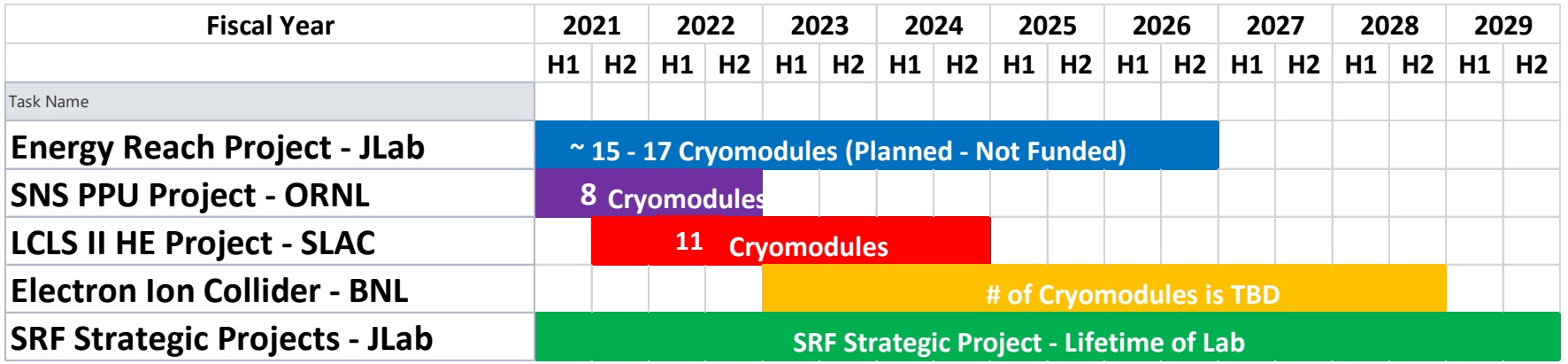
- Added an 8th cryomodule onto the end of the project

LCLS II High Energy Upgrade Project – MLP project with SLAC

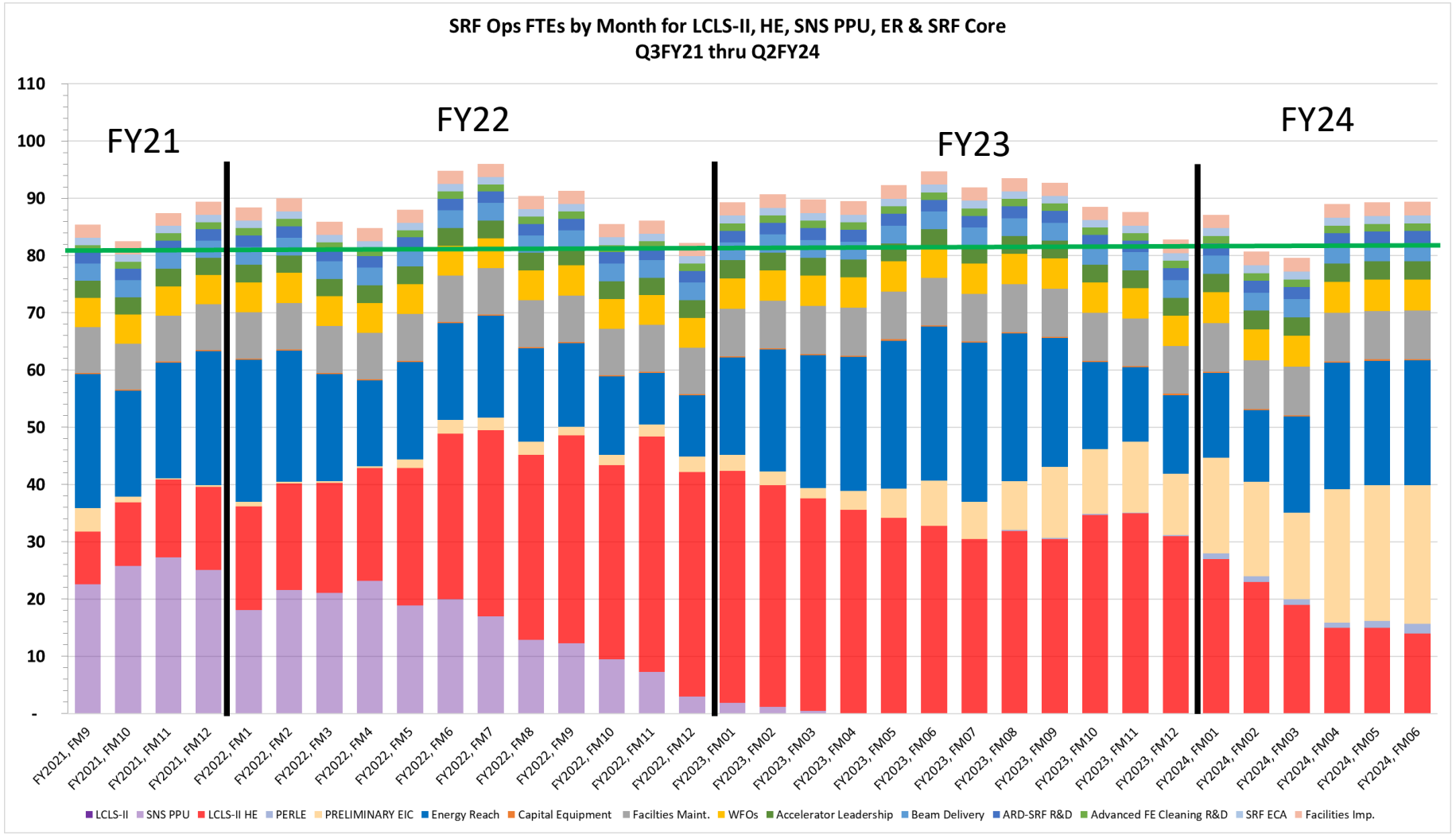
- Added an 11th cryomodule to the end of the project, cavities arrive in September

BNL Electron Ion Collider – MLP project with BNL

- R&D is underway, engineering to start soon for cryomodule design



SRF Ops Staffing Forecast for Q3FY21 through Q2FY24



SRF Ops Open Positions

Search | Save as Search Agent | View Job Cart (0) | View My Account

Now showing jobs 1 - 9 of 9 (0 jobs selected) | How to use this page. Sorted by Relevance

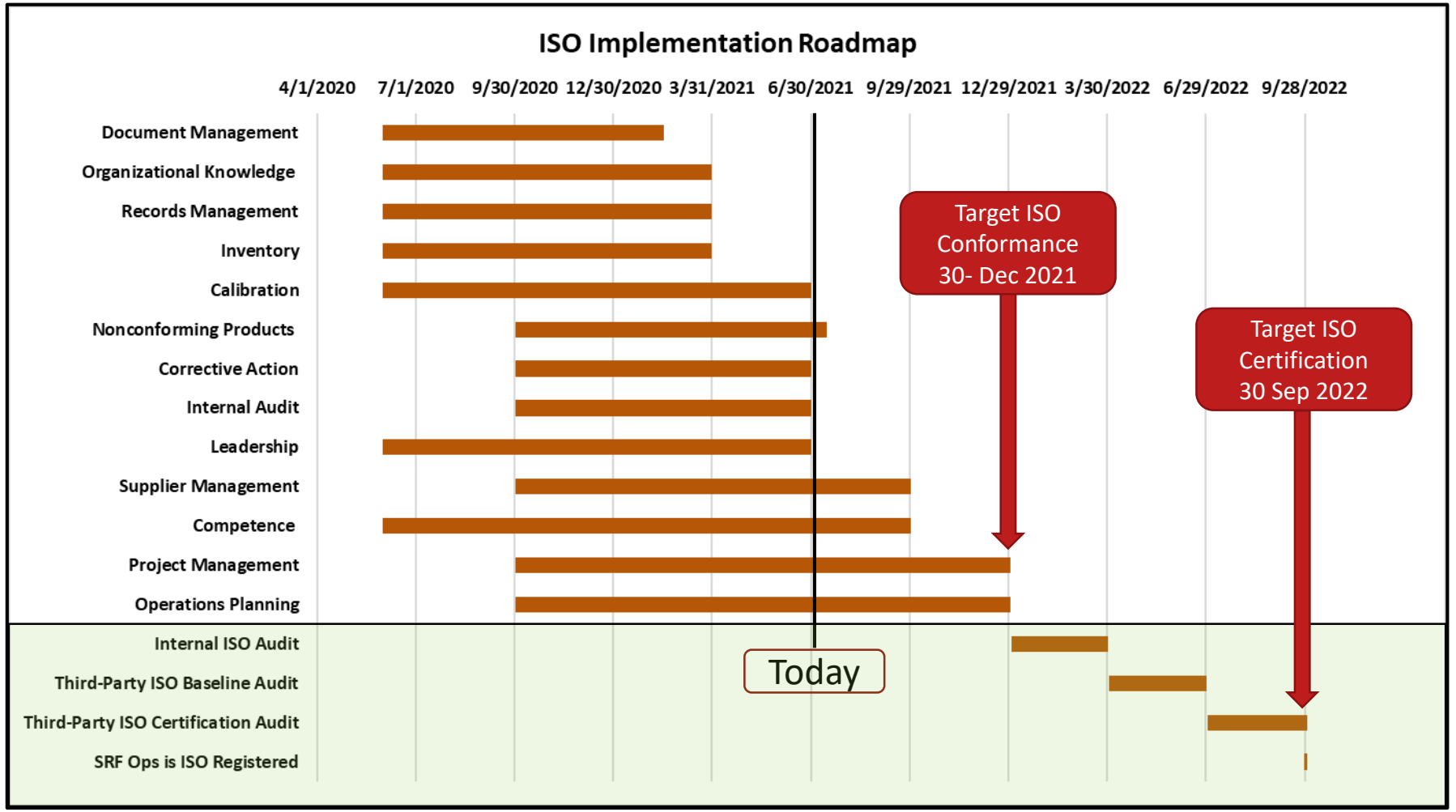
Title	Job ID	Location	Date Posted
Senior SRF Accelerator Physicist	12240	Newport News, VA	Apr 8, 2021
SRF Electronic Fabrication Technician	12238	Newport News, VA	Mar 3, 2021
SRF Cavity Assembly Technician	12235	Newport News, VA	Mar 3, 2021
SRF Cavity Assembly Technician	12236	Newport News, VA	Mar 3, 2021
SRF Test Engineer	12276	Newport News, VA	Jun 21, 2021
SRF Cryomodule Assembly Technician	12228	Newport News, VA	Apr 16, 2021
SRF Cryomodule Assembly Technician	12226	Newport News, VA	Apr 27, 2021
SRF Accelerator and RF Test Engineer	12234	Newport News, VA	Mar 3, 2021
R& D Technologist	12216	Newport News, VA	Mar 3, 2021

Add selected jobs to cart Apply to selected jobs

- 7 open posted positions
- Offer accepted for a Technical Facilities Technician
- Interviewing for Cryomodule Welder/Assembly Technician
- Recently extended Q4FY21 Terms for 2 years
- Looking to continue to extend additional terms by 2 years
- Continuing to look for opportunities to add regular staff
- Looking to open a few more term positions to support ER and MLP projects

ISO 9001 Certification Update

- 9001:2015



"Say what you do. Do what you say."

SRF Ops Processes and their Owners

SRF Ops Process	Process Owner
Leadership	Tony Reilly
Document Management	Jacob Harris
Records Management	Valerie Bookwalter
Organizational Knowledge	Megan McDonald
Competence	John Fischer
Calibration	***Larry King***
Supplier Management	Naeem Huque
Project Management	Ed Daly
Operational Planning	Kirk Davis
Inventory	***Phil Denny***
Nonconforming Product	***Jacob Harris***
Internal Audit	***Jacob Harris***
Corrective Action	***Jacob Harris***

Introductions to…

Calibration

Inventory

Nonconforming Product

Internal Audit

Corrective Action

Calibration – Larry

Introduction of SRF Ops Calibration Program

- The Calibration Program is designed to ensure that equipment relied upon by SRF Ops to provide critical-to-quality measurements are maintained in a calibrated state, and provide reliable and accurate results.

- **Why do we need it?**
  - EHS&Q has a 2010 procedure for sending out MTE to an accredited calibration vendor, and a lab-wide contract to cover the costs (no change here.)
  - Pansophy has a Calibration module to allow custodians to track their equipment (little change here.)
  - For ISO compliance, improvements are needed in:
    - Differentiating between critical and routine measurements
    - Making sure that calibrated MTE is available for those measurements
    - Making sure that all critical measurements are made with calibrated MTE
    - Record keeping and auditability

"…to build safety, reliability, quality, and compliance into our products."

Calibration – Larry

Integration of Calibration into SRF Processes

ISO Quality Management Systems are based on a **process approach**.

The authors of Travelers and Procedures, with input from Work Center Leads, identify measurements that are "Critical to Quality."

Work Center Leads identify the "Critical MTE" needed for the critical measurements made by or within their Work Center.

Calibration Custodians use the Pansophy database to track MTE in their Work Center.

All SRF Ops staff takes care to use only calibrated MTE when required by a Traveler, Procedure or other WCD.

Inventory – Phil

Purpose

- Ensures parts and components, used to produce SRF cavities & cryomodules are received, documented, and stored prior to release to production.

Scope

- Program applies to all projects requiring inventory control as deemed by SRF Operations.
- Program does not apply to projects controlled by or work conducted for R&D, unless specified and approved.
- Program does not apply to Nb Inventory or Cavity Storage

Documents related to Inventory

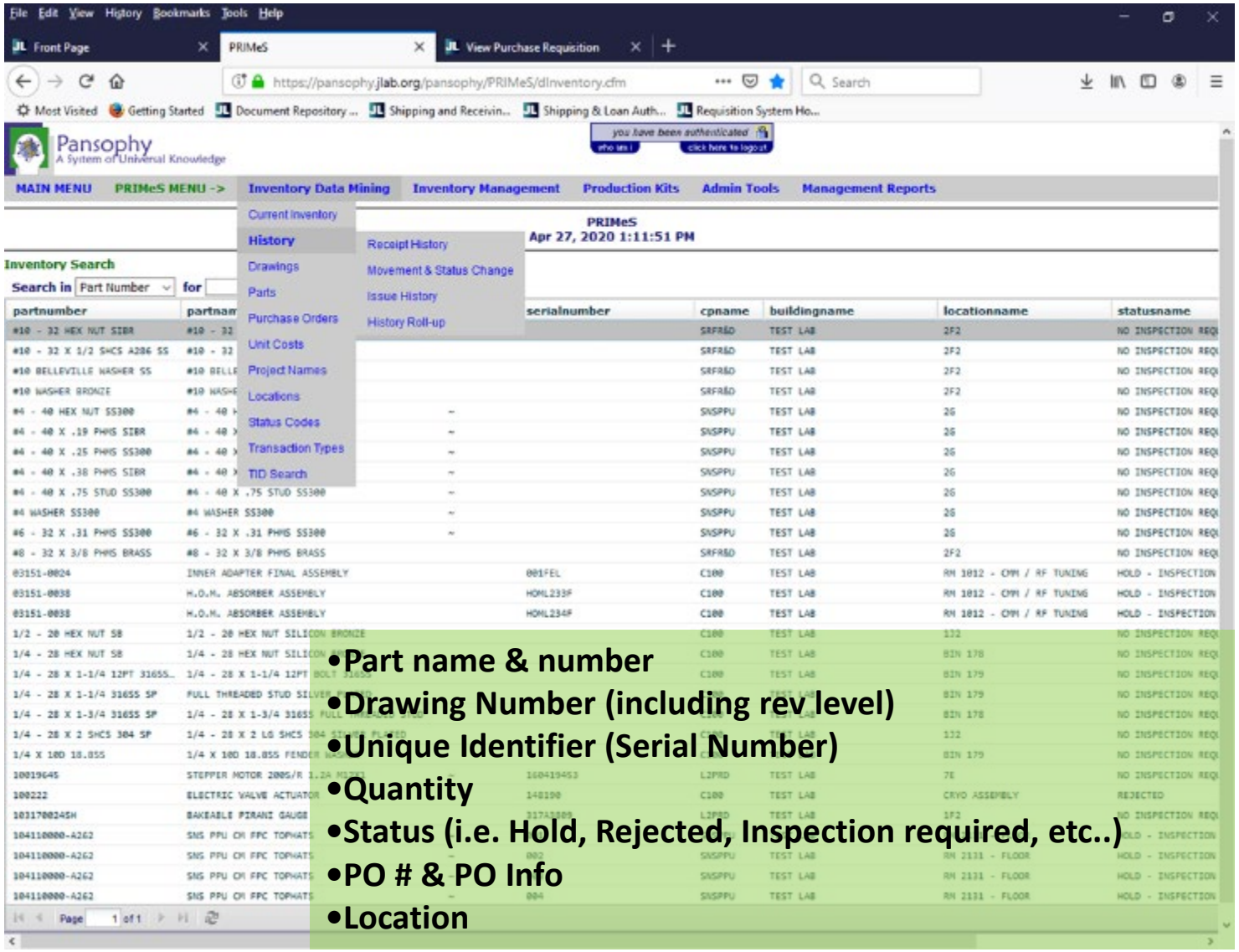
- SRF-09-PD-001 Inventory Program Description
- SRF-09-PR-001 Inventory Control
- SRF-09-PR-002 Serialization

Inventory Systems, Tools, Facilities

- Primes Database
  - Database Search
  - PRIMeS Reports
  - Audits & Metrics
- Serialization Process
  - *JLabDrawingNumber-Revision-SerialNumber*
  - *CRM9007070-0000-B-026*
- North Annex, BlueCrab Warehouse, Satellite TL locations

"Enabling and empowering our people …"

Inventory – Phil



Nonconforming Product - Jacob

Purpose

- Protects the customer from receiving defective parts.
- Provides information for us to improve production processes.

Criteria for Nonconforming Outputs

- Customer Requirements – cavity and cryomodule performance specification
- Internal Requirements – dimensional, physical damage, part performance… etc.

NCR Form

- Existing Pansophy System.
- Rev 12 of the NCR Form will be released soon. Biggest changes are…
  - Final dispositions (Use-As-Is, Reject, Return to Vendor) are moved to the Final Disposition column/field (Page 4).
  - Only Modify and Remeasure are available in the Initial Disposition column/field (Page 2).
  - New final disposition of “Conforming” is added.
  - Use-As-Is is only for non-conforming items that are used with justification.

“Delivering product to plan…” “Proactively and transparently engaging our customers.”

Corrective Action - Jacob

Purpose

- Address systemic/programmatic issues to improve processes.

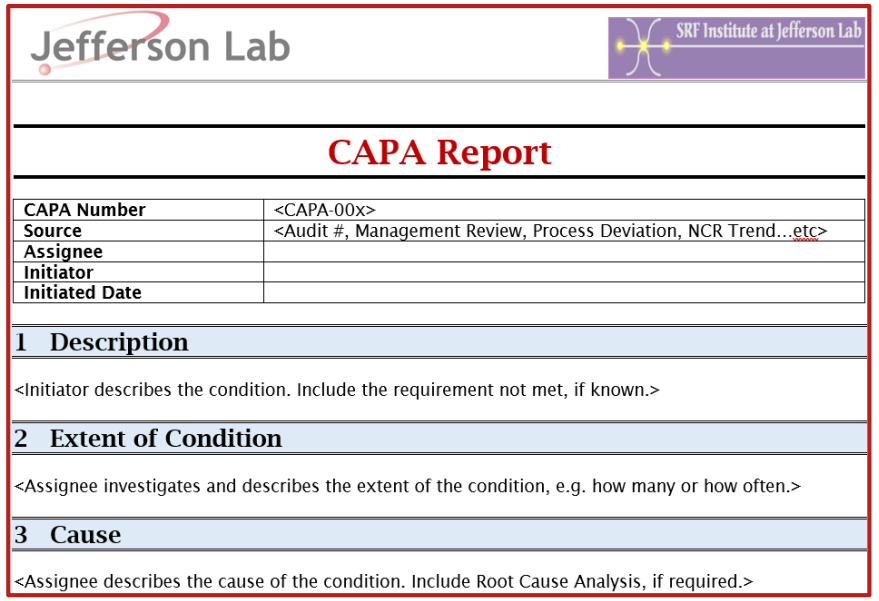
Sources of Systemic Issues

-Collection of similar NCRs	-Management Review
-Audit findings – Internal and External	-Customer Survey

CAPA Report

- Extent of condition – *How many, how often?*
- Investigation of cause – *Why, Why, Why?*
- Corrective action – *Fix the identified conditions*.
- Preventative action – *Prevent the cause of the condition.*
- Verification – *Ensure effectiveness.*

"…driving systemic continual improvement."



Jefferson Lab

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CAPA Report

CAPA Number	<CAPA-00x>
Source	<Audit #, Management Review, Process Deviation, NCR Trend…etc>
Assignee	
Initiator	
Initiated Date	

1 Description

<Initiator describes the condition. Include the requirement not met, if known.>

2 Extent of Condition

<Assignee investigates and describes the extent of the condition, e.g. how many or how often.>

3 Cause

<Assignee describes the cause of the condition. Include Root Cause Analysis, if required.>

Internal Audit - Jacob

Purpose

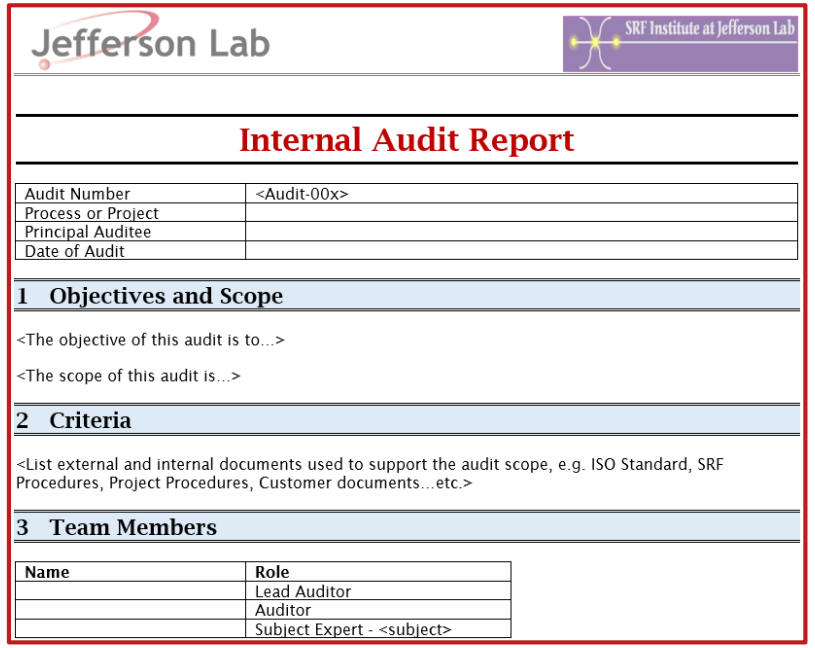
- Provide assurance that our internal processes are operating effectively, e.g. are we doing what we said we were supposed to be doing?
- Identify areas where our internal processes can be improved.

Scope and Frequency

- All processes of our QMS annually.
- Projects or specific processes on request.

Internal Audit Report

- Scope of the Internal Audit – *Process or project.*
- Criteria – *Requirements or documents.*
- Nonconformities/Findings – *Major vs Minor.*
- CAPA Reports - *Assigned to address nonconformities/findings.*



Jefferson Lab

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Internal Audit Report

Audit Number	<Audit-00x>
Process or Project	
Principal Auditee	
Date of Audit	

1 Objectives and Scope

<The objective of this audit is to...>

<The scope of this audit is...>

2 Criteria

<List external and internal documents used to support the audit scope, e.g. ISO Standard, SRF Procedures, Project Procedures, Customer documents...etc.>

3 Team Members

Name	Role
	Lead Auditor
	Auditor
	Subject Expert - <subject>

"Enabling and empowering our people…" "…driving systemic continual improvement."

Summary and Questions

- ISO Certification target date: 30 Sep 2022
- Process Owners hard at work implementing
- Next All-Hands in 3 months.

QUESTIONS?