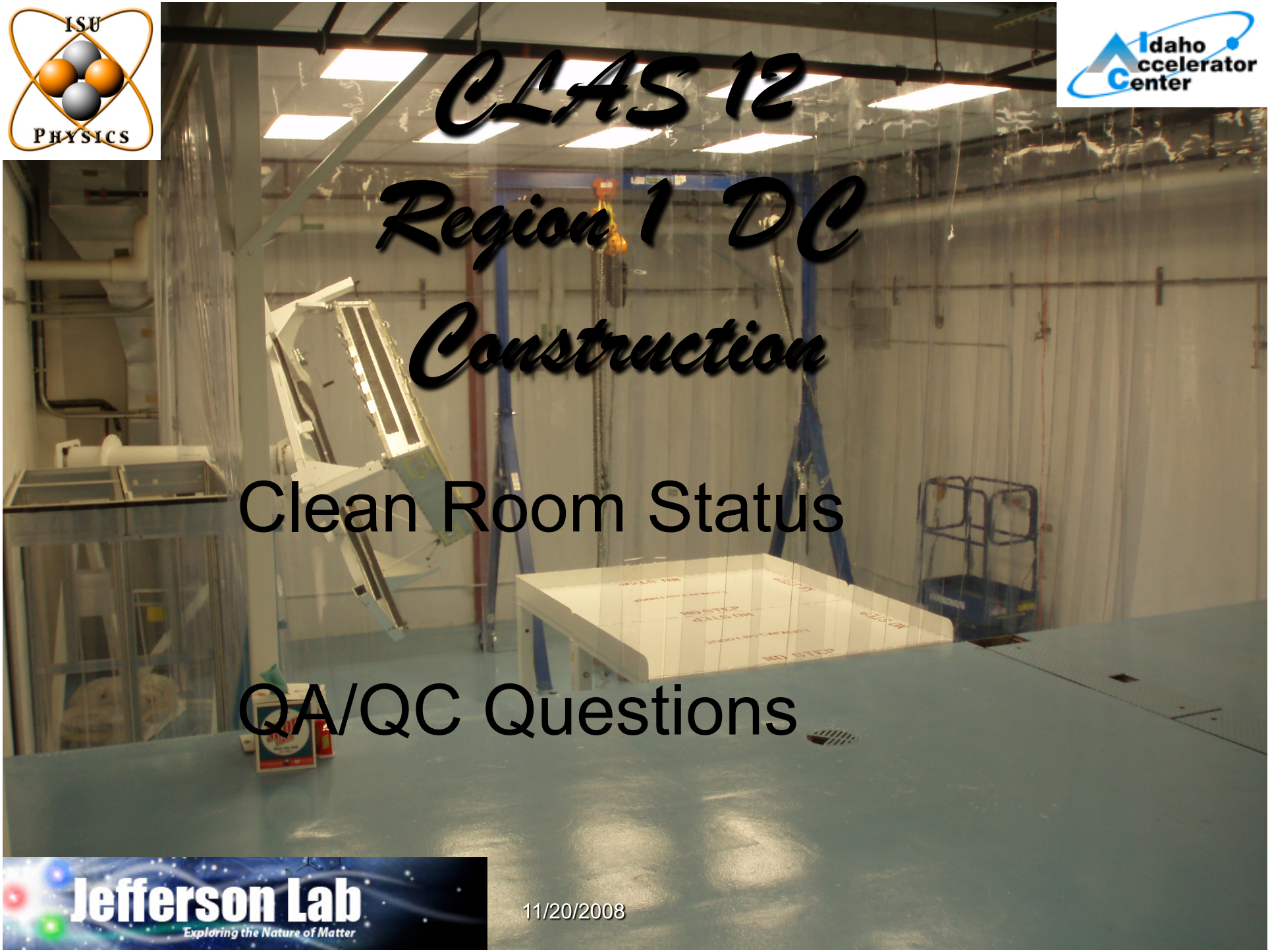
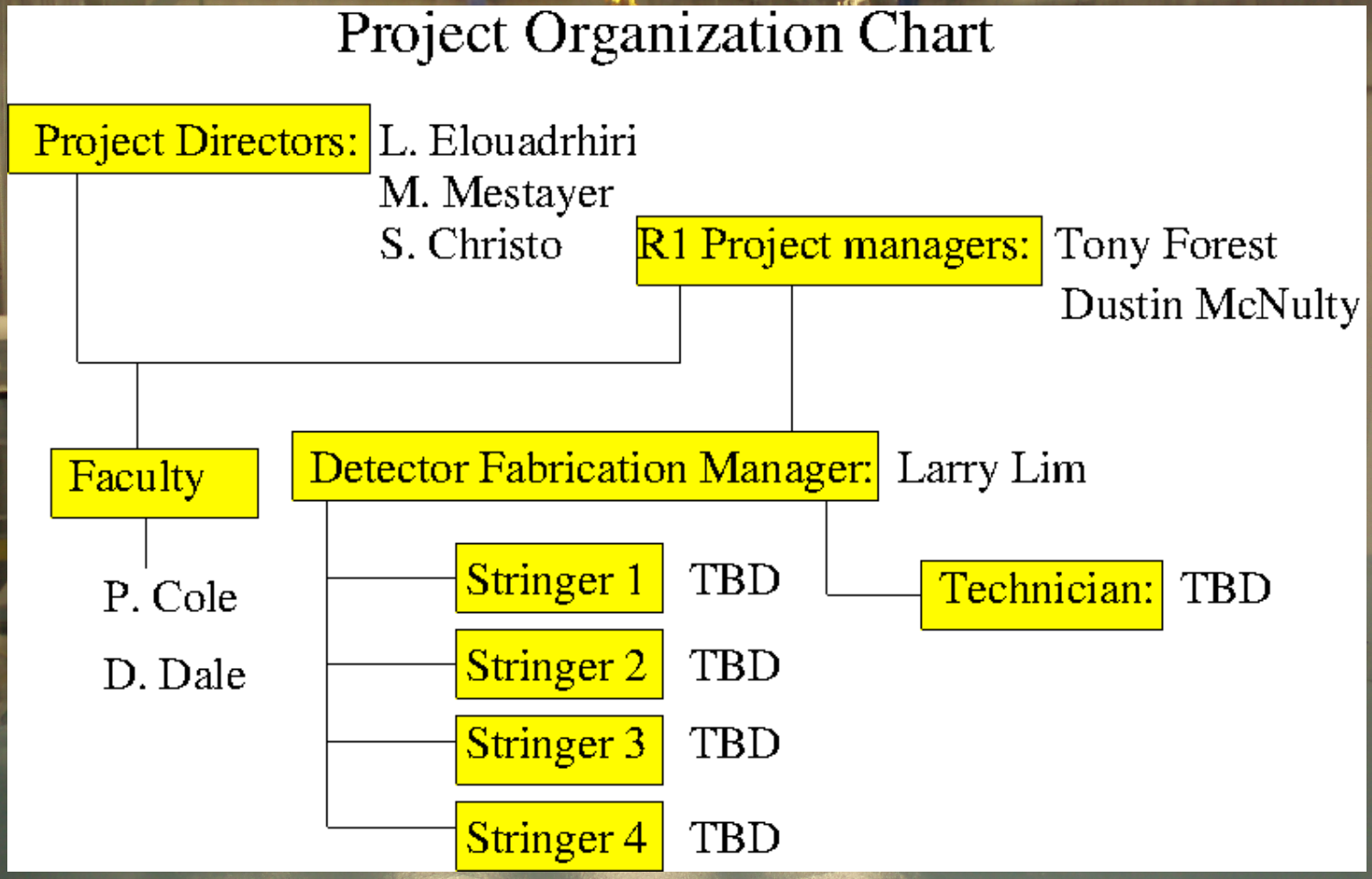


CLAS12 Region 1 DC Construction

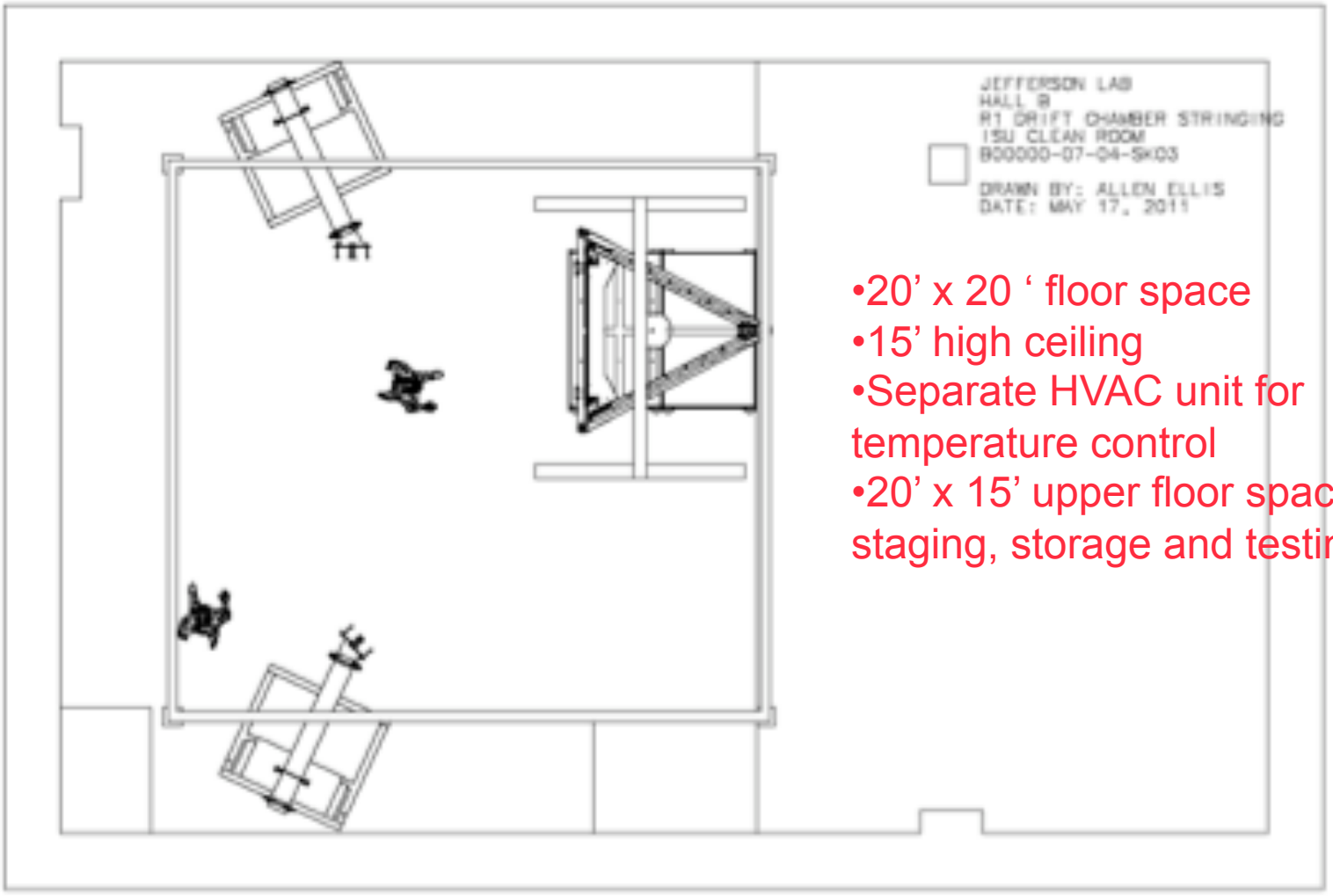
Clean Room Status

QA/QC Questions

Project Participants



Clean Room Description



- 20’ x 20 ‘ floor space
- 15’ high ceiling
- Separate HVAC unit for temperature control
- 20’ x 15’ upper floor space for staging, storage and testing

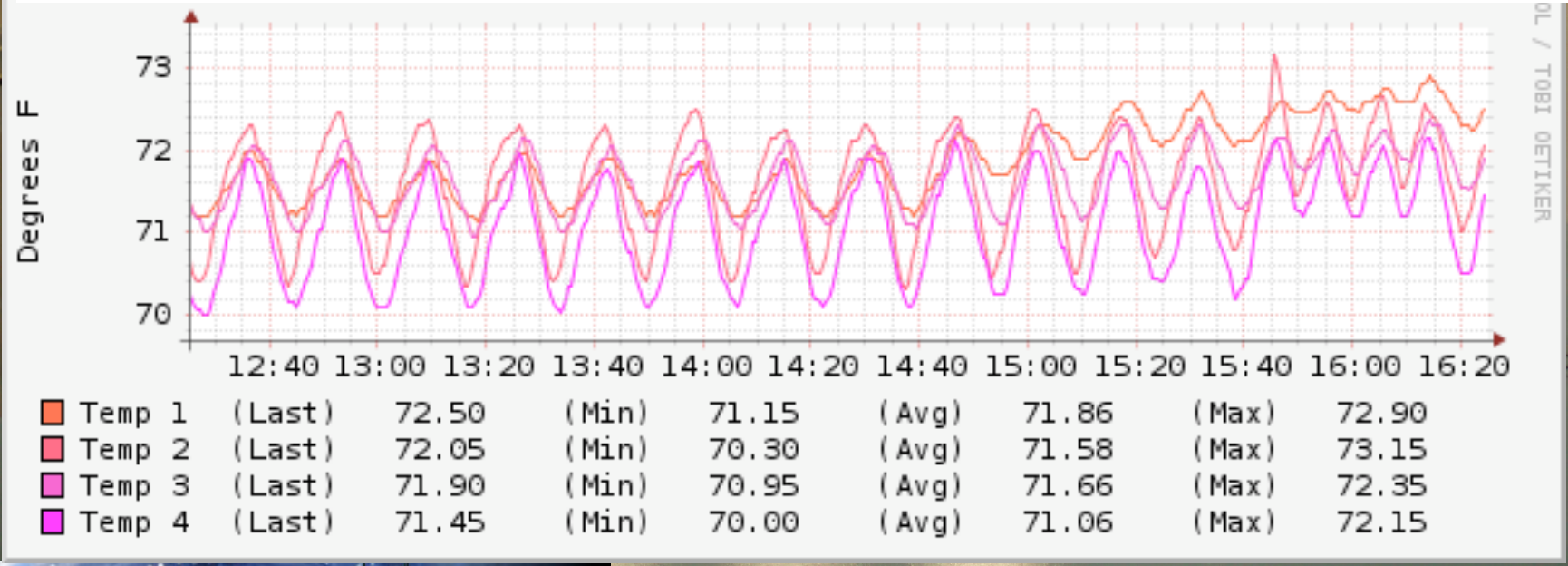
Bob Miller’s Layout

Temperature Control

Goal: Temperature fluctuations < +\- 2 Fahrenheit

Observations:
Over a 4 hour period from 6 am until 10 am (3 people working in room since 8:30)

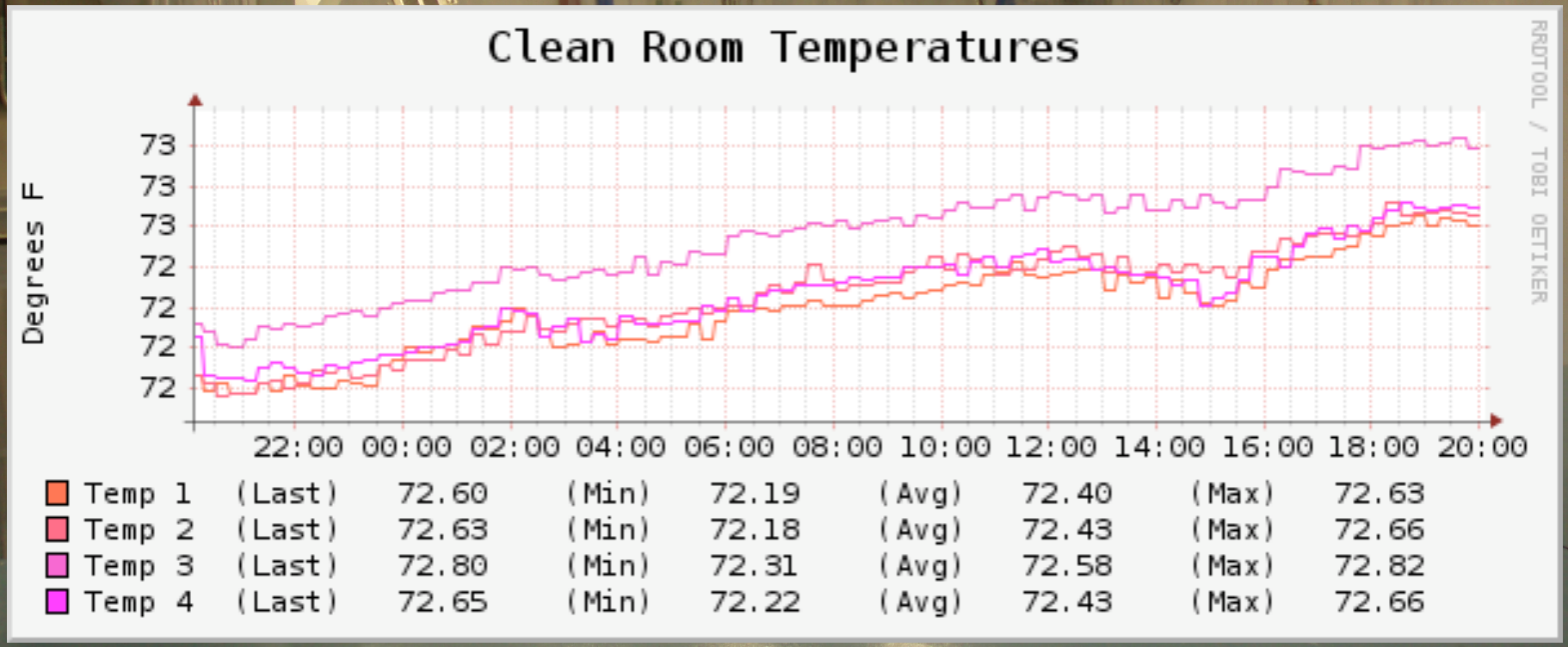
Plan to check temp scale before stringing



Temperature Control

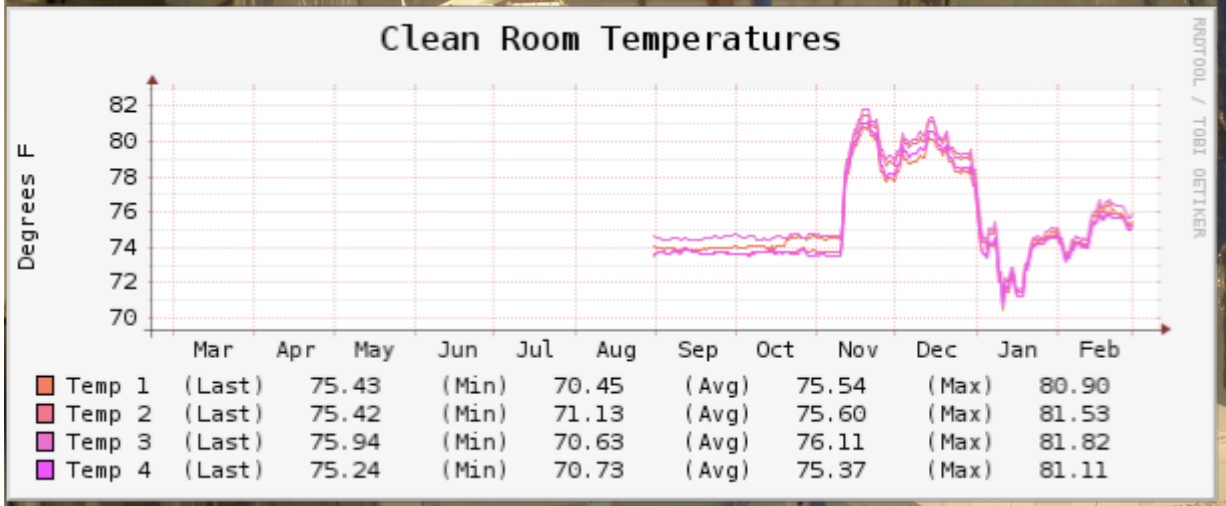
Over a 12 hour period

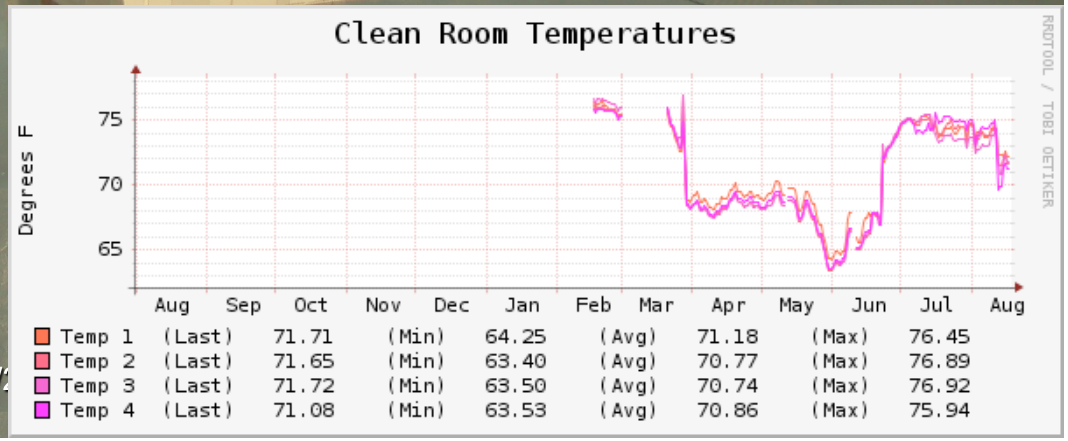
Goal: Temperature fluctuations < +\- 2 Fahrenheit



Temperature Control

Unmonitored: Computers stored in room from Nov-Jan, Heat turned off in March, Started monitoring in June.





Jefferson Lab
Exploring the Nature of Matter

Clean Room Rating

ISO-146441	Fed Std. 209E	> 0.5 micron	> 5 micron
ISO-7	10,000	352,000 max partcles/m^3	2,930 max particles/m^3

Ref: www.set3.com/standards.html

Particle Counter

Kanomax Model 3887
Handheld Laser Particle Counter
Certificate of Calibration Date
(5/19/2011)

Particle Count Measurements

Date	>0.5 micron	>5 micron	Comment
	352,000 max partcles/m^3	2,930 max particles/m^3	Goal
8/12/2011	1,480	0	First Measurement ~6 days after installation
8/16/2011	12,000	1,700	Measurement after curtains were opened so floor paint could dry

QA/QC Questions

1 Project Managers: (see Slide 1)
2 QA Plan: See proposal
3 Assembly Procedures (WIP, Stringing Manual in place)
4 Non-Conformance Procedures (See proposal)
5 Current and Updated Documents (ISU Wiki)
6 Project Org chart Floor (Slide 1)
7 Floor Plan Layout (Slide 3 above)
8 Training records

Training Records

- Manual Dexterity test at interview
- Post hire checklist
  - Wire Stringing Manual
  - Scissor Lift manual
  - Rigging lesson

QA/QC Questions

1 Project Managers: (see Slide 1)
2 QA Plan: See proposal
3 Assembly Procedures (WIP)
4 Non-Conformance Procedures (8/6/2010 MOU)
5 Current and Updated Documents (ISU Wiki)
6 Project Org chart (Slide 1)
7 Floor Plan Layout (Slide 3 above)
8 Training record
9 Calibrated Equipment (slide 8)
10 Role of Students: No students participating in the construction

Known "To Do" Items

- Order more supplies before ready to string
- Install software for documenting QC
- Detailed cleaning
- Hire 2 stringers (10 applicants to choose from)
- Hard Door for Changing Room